A Study of Accidents
and
Accident Insurance



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# A STUDY OF ACCIDENTS

AND

## ACCIDENT INSURANCE

BY

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#### PREFACE.

A study of accidents so impressed the author with the immensity of the annual loss sustained by the whole people in consequence of accidents, and of the importance of awakening the public mind to the need of greater protection to life and limb, not only to the working men in their occupations, but to all classes of people on the streets and in buildings, that he felt impelled to give the results of his investigations to the public.

The students of economic and social questions, as well as many accident underwriters and accident insurance agents have given but little attention to the statistical details of the accident business, and will recognize that the author has entered a field full of promise to future investigators, and he respectfully requests a careful and critical examination of the matter herein presented.

CAMBRIDGE, MASS., 1900.



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## A STUDY OF ACCIDENTS

... AND ...

## ACCIDENT INSURANCE.

#### CHAPTER I.

A BRIEF HISTORY OF ACCIDENT INSURANCE.

The accident insurance business, in its present form, dates back to 1845 in England and to 1850 in the United States.

Walford, in his Insurance Cyclopædia, says: "In the ancient Sea-Laws of Wisby, under date 1541, mention is made of the practice of the owners of ships insuring the lives of the masters against the perils of the sea. The passage in which this allusion occurs is believed not to be part of the original code of Wisby, or indeed it would demand an earlier date; but it is admitted that it must have been interpolated about the date named; and it is therefore the first mention we have of any species of insurance falling within the scope of accident insurance.

"In 1661 M. Cleirac brings under notice a French publication, called Le Guidon, said to have been originally compiled 'for the benefit of the merchants trading in the noble city of Rouen.' This work is believed to be more than 300 years old; and it contains an account of various descriptions of insurance as then practiced, some of which are very remarkable. That most nearly resembling modern accident insurance is as follows: 'Another kind of insurance is made by other nations, upon the life of men, in case of their decease upon their voyage, to pay certain sums to their heirs or creditors.'"

The Republic of Netherlands insured its soldiers engaged in service for their country as far back as 1665, paying for loss of one or both eyes, one or both arms, for both hands, one or both legs, one or both feet. As is the practice now in the best companies, a larger proportion was paid for the right arm than for the left, and for the right hand than for the left hand.

It is probable that the friendly societies of England were among the first of the English-speaking race to cover loss in consequence of accidental bodily injuries under the sick benefits and burial features.

In 1845 there were three companies projected in England to insure against railway accidents, and to these other projections were added; but the first to register was the Railway Passengers', March 22, 1849. The premium charged for people of the first class was £1, covering £1,000 for accidental death. They also provided compensation for non-fatal injuries.

On the 24th of January, 1850, the Accidental Death Insurance Company was projected, and this was the first company to provide compensation for

bodily injuries occurring to any person or persons from any accidental cause or causes not occasioning death.

From the original prospectus of the company we quote the following: "The numerous casualties to which the life of man is liable are subjects of daily occurrence and observation. There is scarcely an individual who cannot refer, within the sphere of his own family or acquaintance, to instances of sudden or accidental death; and few who cannot look back to their own providential escape from imminent danger. To guard against the consequences of such a calamity, whether happening in the pursuit of business or of pleasure, is the duty of every one, and this company will afford to all, according to their circumstances, the means of obtaining so desirable an object."

The rates for those not exposed to any special risk from occupation were £1 for a £1,000 death benefit, and £3, 10s for £1,000 death and £5 per week during disablement, and not exceeding £10 for medical attendance. For railway accidents only the premium was 10s. for £1,000 at death and 5s. per week compensation during disablement. After a short trial, the scheme of medical attendance was abandoned.

In the early years of accident insurance business but little attention was paid to protection against fraud. The number of frauds perpetrated and the amount involved was so large that the Accidental Death Company relinquished the enterprise and transferred its business to another company. Addi-

tional conditions were then introduced in the policies to protect the companies. The occupations were then more carefully classified.

Class 1 included professional men. Class 2 such master tradesmen as performed no manual labor. Class 3 included risks arising from constructive operation, including mechanics and operative classes. Class 4 included the hazardous occupations.

In 1866 an English company introduced the specific compensation form of insurance, covering, as originally, not only the loss of one or both eyes, etc., but also fractures, simple and compound, and dislocations.

The advantage claimed for this plan over the ordinary system of accident insurance is that the amount of compensation for any particular injury is fixed from the time of taking out the policy. We give the scale in relation to a £1,000 policy—that is, if the insured desire to protect his family to the extent of £1,000, in case of his death by accident, he protects himself by becoming entitled to the following scale of compensation in respect to any of the nonfatal injuries enumerated, with a general allowance in case of being entirely disabled by any accidental injury not included in this schedule:

£100 total loss of an eye.
250 total loss of both eyes.
100 total loss of an arm.
250 total loss of both arms.
50 total loss of a hand.

£25 total loss of one or more fingers.

25 compound fracture of any bones of the hands or fingers.

20 fracture of ribs.

60 fracture of pelvis.

60 fracture of patella.

100 total loss of leg.

250 total loss of both legs.

100 total loss of a foot.

50 total loss of one or more toes.

100 fracture of the scull.

50 fracture of lower jaw.

30 fracture of clavicle.

50 compound fracture of clavicle.

50 fracture of the scapula.

65 compound fracture of the scapula.

40 fracture of the fore arm.

50 compound fracture of the fore arm.

20 fracture of any bones of the hands or fingers.

60 fracture of thigh.

80 compound fracture of thigh.

50 fracture of leg.

70 compound fracture of leg.

30 fracture of any bones of foot or toes.

50 compound fracture of any bones of foot or toes.

10 dislocation of shoulder.

15 dislocation of elbow.

15 dislocation of wrist.

10 dislocation of fingers.

£20 dislocation of hip.

20 dislocation of patella.

15 dislocation of any bone, or foot, or toe.

10 dislocation of lower jaw.

"This scheme was devised with a view to lessen some of the defects which attach to the business under the ordinary methods. If this plan of insurance were adopted generally by the accident offices a very large proportion of the fraudulent claims they now sustain would be at once got rid of."

Of the history of accident insurance in the United States but very little is obtainable. Johnson's Encyclopædia gives the Travelers as the first organization for conducting accident business, but we find that in 1847 four companies were organized in Massachusetts to do a health business, and in 1848 five additional companies were organized. We give an account of these companies, because, as will appear, two of them secured amendments to the acts creating them, empowering them to do an accidental insurance business. These companies were organized by special acts, under Chapter 44 of the Revised Statutes. The names of the companies and the date of organization were as follows:

Massachusetts Health Insurance Company, Boston, April 21, 1847.

Essex County Health Insurance Company, Beverly, April 23, 1847.

Worcester Health Insurance Company, Worcester, April 23, 1847.

Lowell Health Insurance Company, Lowell, April 26, 1847.

Ocean Mutual Health Insurance Company, Gloucester, April 5, 1848.

Norfolk County Health Insurance Company, Dedham, May 10, 1848.

Newburyport Health Insurance Company, Newburyport, May 10, 1848.

United States Health Insurance Company, Boston, May 10, 1848.

Haverhill Health Insurance Company, Haverhill, May 10, 1848.

We give Sections 1 and 2 in full, and a summary of the remaining sections of the act incorporating the Norfolk County Health Insurance Company. All the other acts, outside the names of the incorporators and the name of the company, were copies of the original act.

"Be it enacted by the Senate and House of Representatives, in General Court assembled, and by the authority of the same, as follows:

"Section I. Stephen Bates, John L. Low, Abner Childs, their associates and successors, are hereby made a corporation by the name of the Norfolk County Health Insurance Company, to be established in the town of Dedham, for the purpose of making insurance upon health, with all the powers and privileges and subject to all the duties, liabilities and restrictions set forth in the forty-fourth chapter of the Revised Statutes, so far as the same may be applicable to this corporation.

"Section 2. The capital stock of said corporation shall not exceed \$50,000, and shall be divided into shares of \$25 each; and there shall be paid into the treasury of said corporation by each subscriber to the capital stock, at the time of subscription, an instalment of \$5 on each share of the stock by him subscribed, and the remaining \$20 on each share so subscribed shall, within thirty days from the time of said subscription, be secured to be paid by mortgage on real estate or by such endorsed promissory notes as shall be approved by the directors of said corporation, and shall be payable in thirty days after demand shall have been made in some newspaper printed in the town of Dedham, or in case no newspaper is printed in the town of Dedham, then in some newspaper published in the County of Norfolk; or the same may be made payable in regular instalments at stated periods, at the discretion of the directors."

The fourth section covers investments.

The fifth section covers dividends.

Section 6 provides that the divisions of profits among the stockholders shall never exceed 8 per cent. per annum on the capital stock already paid in, but such surplus of profits over 8 per cent., if any, shall be divided among the insured, but no dividend whatever shall be made whereby the capital stock of said corporation subscribed and paid in shall be reduced or impaired.

Section 7 provides that unpaid dividends be advertised.

Section 8 provides that subscribers to stock may be required to effect insurance in the company.

Section 9 provides for suits at law by any stock-holder or person insured.

Section 10 provides that balance statements shall be made periodically, and sets forth what they shall consist of.

Section 11 provides that nothing in the act authorizes the company to engage in life insurance or anything save insurance upon health, nor is it permitted to insure more than \$400 per annum on any one risk.

In 1850 the Haverhill and the Norfolk County Health Insurance companies secured the passage of an act changing their names, and permitting them to do an accident insurance business.

The name of the Haverhill company was changed to the American Health Insurance Company, and that of the Norfolk County Health Insurance Company was changed to the Franklin Health Assurance Company.

Section 1 of the act makes the change of name. Section 2 of the act referring to the Norfolk County Health Insurance Company reads as follows:

"Said company may assure to the holders of its policies, an allowance in money, for the time during which they shall be unable to transact business, or labor in their accustomed vocation, in consequence of personal injuries, resulting from accident, or otherwise." This act was approved by the Governor February 12, 1850, and is, as far as our researches go, the first act passed by any State of the United

States establishing the accident insurance business.

The act changing the name of the Haverhill company, and enlarging its powers, contains four sections. The first section covers the change of name.

Sections 2, 3 and 4 read as follows:

- "Section 2. Said company may assure to the holders of its policies an allowance in money, for the time during which they shall be unable to transact business, or labor in their accustomed vocation, in consequence of personal injury resulting from accident or otherwise.
- "Section 3. The holder of any policy issued by this company shall be entitled to receive the amount that may become payable on such policy, for his own benefit and that of his family, and the same shall not be liable to attachment or execution for any debt due from him.
- "Section 4. So much of the first section of the act, entitled 'An Act to Incorporate the Haver-hill Health Insurance Company,' passed on the 10th day of May, in the year 1848, as requires that the terms and conditions of its policy shall be approved by the Governor and Council, is hereby repealed."

This act was approved by the Governor April 23, 1850.

In addition to these two acts, we find an act establishing the Peoples' Health Assurance Company of Springfield. The act reads as follows:

"Be it enacted by the Senate and House of

Representatives, in General Court assembled, and by the authority of the same, as follows:

- "Section 1. John Mills, William B. Calhoun, George W. Rice, their associates and successors, are hereby made a corporation, by the name of the Peoples' Mutual Health Assurance Company, in the town of Springfield, for the purpose of making insurance on health, with all its powers and privileges, and subject to all the duties, liabilities and restrictions, set forth in the forty-fourth chapter of the Revised Statutes.
- "Section 2. There shall be an original guaranty capital stock subscribed to said corporation which shall be \$5,000, to be divided into shares by said corporation, half of which shall be paid in, in money before the said corporation shall go into corporation for the purpose of making insurance; the other half of said stock may be called for by the directors from time to time, when they deem it necessary or expedient, and shall be paid in by the holders of the stock, which shall always stand pledged to the corporation for all assessments so called for.
- "Section 3. At the first meeting of the corporation a number of directors, not less than twelve, shall be chosen by the subscribers to the guaranty stock, who shall hold their office for one year, and until others are chosen in their stead. At all subsequent elections of directors the number shall be such as may be provided for by a provision of the directors or by the by-laws of the corporation, and in case of no provision on this subject, the number shall be the

same as at the first election, one-half of whom shall be elected by the stockholders and the other half by the assured, voting in separate bodies; the directors shall all be either stockholders or assured, and on ceasing to be such, shall cease to hold office.

"Section 4. Whenever the net surplus receipts of the corporation, over losses and expenses and after providing for risks, shall be sufficient for the purpose, the stockholders shall be entitled to an annual dividend of six per centum, and in case of such dividend not being paid in any one year, it shall be made good at a subsequent period, when the net resources of the company shall be sufficient paying the same.

"Section 5. After providing for risks, losses, incidental expenses and the dividend aforesaid, the directors shall annually set apart not less than one third of the estimated surplus funds and receipts as a reserve fund to be applied to the redemption of the guaranty stock; and whenever, after the expiration of five years from the time of organization of the Company, the amount of such reserved fund shall be sufficient for the purpose, and the assured shall vote to redeem the guaranty stock, the same shall be redeemed.

"Section 6. Upon the redemption and extinguishment of the guaranty stock under the provision in the fifth section, the directors shall be chosen by the assured.

Section 7. Said company shall assure to the holders of its policies an allowance of money for the time during which they shall be unable to transact business or labor in their accustomed vocation in

consequence of personal injury resulting from accident or otherwise.

SECTION 8. The holder of any policy issued by this company shall be entitled to receive the amount that may become payable on such policy for his own benefit and that of his family, and the same shall not be liable to attachment or execution for any debt due from him.

Approved by the Governor April 25, 1850.

As the corporation documents of this period are unavailable, we have no further history of these companies, save that the following, a copy of a policy of the Franklin Health Insurance Company, under date of October 25, 1850, has been preserved. We give a copy of this policy from the columns of the "Accident Assurance," published by W. H. De Hooper:

Franklin Health Assurance Company, of Massachusetts. Capital, \$50,000.

Especially empowered to insure against accidents.

This policy of assurance witnesseth that, in consideration of fifteen cents, paid therefor, the Franklin Health Assurance Company do assure the party whose name, with the time of purchase and delivery, is endorsed hereon, for the term of twenty-four hours, from and after the date so endorsed, and promise to pay to the said party, or to the legal representatives of said party, the sum of two hundred dollars; provided the said party shall, during the

continuance of this policy, receive any bodily injury in consequence of an accident by a railroad or steamboat, and thereby be detained for the term of ten days: or if, by such accident, caused by a railroad or steamboat, the said party shall be totally disabled from attending to any business for the term of two months next succeeding such accident and injury, this company hereby agree and promise to pay, in lieu of the above-named sum, the sum of four hundred dollars, payment to be made within thirty days after notice and proof are given to the company. No. 62. Boston, July 1st, 1850.

(Signed), STEP. BATES, Secretary.

This policy insures travelers only, and not persons employed on the road.

The premium on this policy was fifteen cents.

In 1864 the Travelers of Hartford, Connecticut, commenced business. Many competitors, all stock companies, entered the field, but were either absorbed, closed up business, or failed.

In 1877 the first mutual accident association was established in New York.

The oldest stock company in existence in the United States is the Travelers of Hartford, Connecticut, commencing business, as stated above, in 1864. The oldest fraternal company is the Iowa State Travelling Men's Association, commencing business in 1880. The oldest mutual company is the Massachusetts Mutual Accident Association, commencing business in 1883. Many other companies—stock, fraternal

and mutual—have been organized since this last date with varied success or failure.

On December 18, 1891, representatives of several accident companies and associations organized an association under the name of the International Association of Accident Underwriters. This name was given at the suggestion of Mr. H. N. Kingsbury, Secretary of the Fraternal Accident Company, of Westfield, Mass., with the idea that the name would cover all forms of the accident insurance business in the United States and Canada. The by-laws adopted did not limit the membership of the association to any form of organization.

The association contemplated the admission of any company doing a legitimate accident business according to well authorized classification of risks. Conventions were held at Niagara Falls, Buffalo, Chicago, Boston, Thousand Islands, Atlanta, Utica, Chicago, Put In Bay, Nantasket, and again at Niagara Falls.

At the convention in 1895, at Niagara Falls, a bureau of information was organized. Conventions of this body have proved of great advantage to accident underwriters, whether members of the association or not. Discussions were had upon forms of application, policies and claim blanks, classification of claims, classification of risks and exposures, uniformity of language used in policies, etc.

At some of these conventions the examining surgeons of the companies have been present, and separate meetings were held for the discussion of the medical work and surgical side of the accident business. For some years the International Association met at the same time and place as the association of assessment life underwriters. In 1895 the International Association held their conventions at other places than those held by the Assessment Life, in order to more clearly show the differences that existed between the two forms of insurance, and to emphasize the fact that while in the life insurance business there was an increase of liability with increased age, in the accident insurance business there was no such increase; also that life business is based upon a mortnary basis, while the accident business is based upon a classification of risks and exposures.

According to the latest reports for the year ending December 31, 1899, there were 16 stock companies, with \$1,627,220,363 insurance in force. Of the fraternals, there were 10 companies, with \$301,705,162 insurance in force. There were 15 mutual companies, with \$192,714,724 insurance in force, and 6 foreign companies, with \$98,109,853 insurance in force, making a grand total of 47 companies or associations, with \$2,219,750,102 insurance in force.

As the income of some of the stock companies is received for other than personal accident insurance, we give in the following tables figures representing eight stock companies, fifteen mutual companies and ten fraternal associations.

The	companies	received	nremiume	26	follows .
1110	companies	received	premiums	as	TOHOWS.

Stock companies .			\$6,395,258
Fraternal companies			755,618
Mutual companies .		•	1,149,435
Making a total of .			\$8,300,311

#### These companies paid benefits as follows:

Stock companies		٠	\$2,226,927
Fraternal companies		•	412,064
Mutual companies	•	•	485,737
Making a total of			\$3,124,728

The fraternal and mutual companies report 162,-702 policies in force, but as the stock companies make no such report, the total number of policies cannot be given. It is fair to estimate that the amount paid to each claim in the stock companies is larger than that paid in the fraternal and mutual companies, because of the fact that the stock companies write a very much larger amount upon any one risk, writing as high as \$20,000 for an accidental death benefit and \$100 weekly indemnity.

From figures given in other parts of the report, it would appear that the stock companies had some 300,000 policies in force. This would give a grand total of about 463,000 policies in force.

It must be understood that the expense of conducting the accident insurance business is extremely large (except in fraternal associations, who have no paid agents), as large commissions must be paid to

agents, and a considerable sum of money is necessary to protect the company from fraudulent claims.

In the fraternal and mutual companies the money received, over and above that necessary for the payment of claims and expenses, is the property of the policy holders, and not of the stockholders or board of directors, while in stock companies it is wholly the property of the stockholders.

No objection is intended, or indeed can be made, against the stock accident insurance companies; they are doing, and have done, a very important work to the community. Millions of dollars are annually distributed by them to their policy holders. We have called attention to the difference between the two forms, in order that the reader may understand the true merits of mutual and fraternal associations, and that the misrepresentations of unworthy agents may be taken at their true value.

Mutual companies do not assess their policy holders. The policy holders are required to make regular payments of a stated amount. Under the laws creating these associations, they are required to make an assessment in the event that these payments do not fulfil the conditions of their contract. The facts and figures herein given show that if enough is charged to cover the average risk of a term of years, no assessment will be required. As in life insurance the mortality tables afford a safe basis for estimating premiums, so in accident insurance the law of average as to accidents seems to afford an equally accurate basis; so that if the rate of pre-

miums is established at a safe starting point, it is bound to hold at about that point during succeeding years. But, as has been stated by an officer of one of the stock companies,—"In the last resort, success depends upon the integrity, wisdom and ability of the management more than upon any other one thing."

Mr. Edson S. Lott, Secretary of the United States Casualty Company, in an address before a convention of insurance commissioners, said:

"I am acquainted with a city of considerable size in which the merchants seem to be all in a tacit league to uphold one another's credit, particularly where the interests of an outsider are alone concerned. That is a strikingly prosperous city. As a rule, casualty companies are in no need of factitious support for their credit. Those that cut any considerable figure in the commercial world can rely upon their resources and their reputation for prompt adjustment of losses, to sustain their financial standing. Nevertheless, there is no company so well established as to be entirely beyond the reach of injury from continual assaults of competitors. "Live and let live" should be the prevailing rule of conduct. For every accident insurance company that is properly equipped and well conducted the world is amply able and willing to furnish a handsome subsistence."

At the same convention Mr. George F. Seward, President of the Fidelity and Casualty Company, held "that the test of a company's soundness is in the right statement of its reserves, its capital stock being intact. Its capital stock may be \$500,000 or \$50,000 or \$5.00. If it is intact, the company is sound. \* \* Losses and expenses are paid from premiums, and every unnecessary dollar put into capital is a burden."

Until the accident insurance business is carried on by the State, it must be conducted by fraternal or mutual associations or stock companies. In any event, it demands exceptional qualifications.

The failures of the companies organized in 1847–48-50 was doubtless due to lack of patronage and the lack of experience of the managers. England was then experimenting, and it was many years before a sufficient patronage could be secured to warrant success.

The failures of recent years were due to low rates, to unwarranted demands upon the funds for the payment of claims not contemplated as coming under an accident policy, and to questionable management.

#### CHAPTER II.

FACTS AND DEDUCTIONS FROM AN ANALYSIS OF ONE THOUSAND CONSECUTIVE ACCIDENTS, WITH DIAGRAMS AND TABLES.

It is a fact of common knowledge in insurance circles that annually, one in seven of the insured persons meets with an accident of such severity as to require the attendance of a surgeon, and cause a loss of time, limb or life. These accidents occur to men and women in the different professions and occupations of life.

The exhibits herein given cover only a small number of women insured. These women are principally government clerks.

The diagrams and tables herein cover one thousand consecutive accidents occurring to persons engaged in over one hundred professions and occupations.

Diagram No. 1 is an exhibit of injuries to every part of the human body.

Diagram No. 2 shows the hours of the day and night in which these injuries were received.

Diagrams Nos. 3, 4 and 5 give the number injured, the amount paid, and the number insured in the classified professions and occupations.

Diagram No. 6 gives the nature of the injuries, with the number of injured, and the amounts paid.

Diagram No. 7 is an exhibit of what the insured were doing at the time the accident occurred.

# AN ANALYSIS OF 1000 CONSECUTIVE ACCIDENTS.

#### DIAGRAM No. 1.

We give, on the opposite page, an exhibit of nine hundred and ninety-four consecutive accidents, covering every part of the human body, amounting in indemnity to \$33,967.05. In addition, there were six fatal accidents, amounting in death benefits to \$13,100.

It will be noted that the hands and fingers are the most exposed parts of the human frame and receive the largest number of accidental bodily injuries.

The right hand received	d 51	accidents,	amount paid	\$1,775.17
Fingers of right hand	103	4.6	66	2,832.17
Left hand	51	66	66	1,248.21
Fingers of left hand	78	4.6	4.6	1,807.60
Both hands	6	66	64	215,36
Making a total of	289	6.6	"	\$7,878.51

The liability of the fingers to accidental injury, as here exhibited, is verified by a report of an accident company some few years ago, covering 10,000 accidents, of which 2,920 were accidents to the fingers. But the most impressive fact to be deduced from this exhibit is that men are constantly exposed to disabling injuries in every part of the human body and that no part thereof is exempt.

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	Head, Top	Frontal Bone	Eye, Left	Face and Cheeks	Throat	Clavicle	Ribs	Shoulder, Lr.	Arm. Lt.	Elbow, Lt.	Wrist, Lt.	Fingers. Lt. H.	Hand. Lt.	Abdomen	Privates	Coccyx	Thigh, Lt.	Hip. Lt.	Кпее, Lt.	Both Knees	Lower Leg. Lt.	Ankle. Lt.	Heel. Lt.	Foor, 21.	Toes, Lt.	
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#### DIAGRAM No. 2.

On the opposite page we give a further exhibit of the nine hundred and ninety-four non-fatal consecutive accidents, showing the number of accidents and amount paid for each hour of the day and night.

This diagram shows that the largest number of accidents occurred between So'clock and 11 o'clock in the forenoon, and between 3 and 6 o'clock in the afternoon; or during the usual hours of employment. Accidents occurring about the house and grounds generally occur in the morning or evening. Accidents occurring while engaged in some amusement usually occur in the afternoon and evening, although a detailed account would show that men are hurt while engaged in amusements, especially bicycles, during nearly every hour of the day. It is also true that persons are engaged in occupations during every hour of the day, and that injuries are received by persons while pursuing their occupations during all the hours of the day and night. These accidents to night workers are largely confined to physicians, pulp and paper mill employees, motormen and conductors on street railways, and railway employees generally.

The accidental deaths occurred as follows:

I between 9 and 10 P. M.

2 between 10 and 11 A. M.

ı at II А. м.

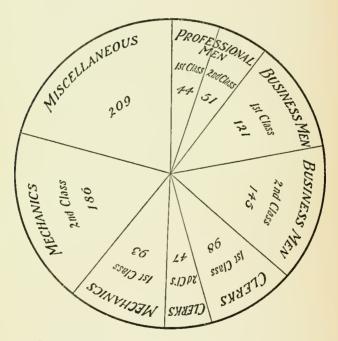
1 at 3 P. M.

I at 4 P. M.

DIAGRAM 2. A. M. Amir Pa. \$104 81 2.669 42 3.190 96 1.997 53 1,964 1.129 S Midnight S P. M. Am'r Pd. 285 56 1.522 05 9/ 2,391 09 3,172 1,574 1.588 1.539 2,347 2.571 1.2 

#### DIAGRAM No. 3.

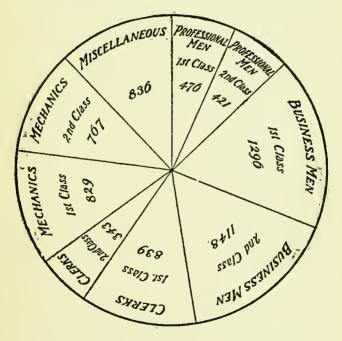
Exhibit of the same accidents as given in Diagrams Nos. 1, 2 and 4, showing the number of those injured, according to professions and occupations.



See Diagrams 3 and 5, also tables of totals and averages, pages 33 and 34.

# DIAGRAM No. 4.

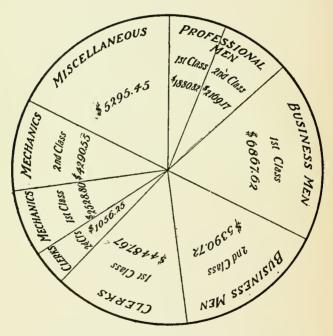
Exhibit showing the amounts paid to the professions and occupations. See Diagram No. 3.



See Diagrams 3 and 5, also tables of totals and averages, pages 32 and 34.

# DIAGRAM No. 5.

Exhibit giving the number insured in each occupation, or the number of exposed risks within which the 1000 consecutive accidents occurred.



See Diagrams 3 and 4, also tables of totals and averages, pages 32 and 33.

TABLE OF PROFESSIONS AND OCCUPATIONS GIVEN IN THE PRECEDING DIAGRAMS WITH NUMBER OF ACCIDENTS TO EACH OCCUPATION OR PROFESSION AND THE AMOUNTS PAID.

#### 1000 ACCIDENTS ACCORDING TO OCCUPATION.

#### First Division.

PROFESSIONAL MEN. "A."

	Actors .	•	•	•	•	٠	•				I	\$25.00
	Architects										3	55.70
	Civil Engir	neer	s								2	87.39
	Clergymen										7	237-14
	Dentists .										9	5,498.28
	Lawyers.										8	345.71
	Musicians										9	237.50
	Teachers										4	218.03
	Veterinary	Su	rge	on	s						2	176.07
	3		J						-		_	
										4	-5	\$6,880.82
Prof	ESSIONAL M	IEN.		"B	."							
	Physicians	and	ıs	11 20	eo.	ns				5	τ.	2,169.17
	1 my siciams	unu		8	,00	•••	·		·	J	-	2,109.17
			S	ecor	uđ	$D_{i}$	vis	ion	ι.			
D	maa Mmsr	66 8	٠,	,								
Busi	ness Men.	" A	٧.،	,								
Busi	ness Men. Bankers	" A	۷.۳							1	I	\$5,333.12
Busn	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,										1	\$5,333.12 1,498.74
Busi	Bankers .	n O	ffic	ers.						2		
Busi	Bankers .	 n O: ıl <b>T</b> :	ffic rav	ers elle	ers					2	5	1,498.74
Busn	Bankers . Corporation	n Oi il Ti Mer	ffic rav	ers elle ant	ers					2 2	5 6	1,498.74 1,730.66
Busn	Bankers . Corporation Commercia Wholesale	n O: il Ti Mer rers	ffic rav	ers velle ant	ers s .					2 2 2	5 6 0	1,498.74 1,730.66 1,110.10
Busi	Bankers . Corporation Commercia Wholesale	n O: il Ti Mer rers	ffic rav ch	ers velle ant	ers s .					2 2 2 1	5 6 0	1,498.74 1,730.66 1,110.10 485.36
Busi	Bankers Corporation Commercia Wholesale Manufactur Real Estate	n Oil Il Ti Mer rers e Me Men	ffic rav ch	ers relle ant	ers			•	•	2 2 2 1	5 6 0 2	1,498.74 1,730.66 1,110.10 485.36 728.00
Busi	Bankers Corporation Commercia Wholesale Manufactur Real Estate Insurance I	n Oil Il Ti Mer rers e Me Men	ffic rav ch	ers relle ant	ers			•		2 2 2 1 1	5 6 2 2 3 3	1,498.74 1,730.66 1,110.10 485.36 728.00 636.64 345.00
Busn	Bankers Corporation Commercia Wholesale Manufactur Real Estate Insurance I	n Oil Il Ti Mer rers e Me Men	ffic rav ch	ers relle ant	ers			•		2 2 2 1	5 6 2 2 3 3	1,498.74 1,730.66 1,110.10 485.36 728.00 636.64

Business Men. "B."	
Merchants, Retail 27	\$1,123.69
Grocers and Provision Dealers-	
Proprietors 21	614.83
Apothecaries 11	512.70
Contractors	337.11
Bakers 11	475.97
Restaurant and Saloon Keepers . 9	336.69
Livery Stable Keepers 8	246.98
Barbers 7	137.14
Undertakers, Proprietors 4	110.52
Confectioners 4	133.56
Editors, Printers, Proprietors . 8	128.17
Hotel Proprietors 4	178.50
Photographers 2	137.50
Granite and Stone Dealers 2	280.00
Jewellers 5	264.50
Boarding-house Keepers 2	77.86
Miscellaneous 9	295.00
145	\$5,390.72
145	φ5,390.72
Third Division.	
CLERKS AND SALESMEN, Etc. "A."	
Government Clerks 25	\$1,315.62
Book-keepers 28	1,133.67
Salesmen 40	1,860.67
Hotel Clerks 3	137.71
Telegraph Operators 2	40.00
98	Ø
90	\$4,487.67
CLERKS AND SALESMEN, ETC. "B."	
Grocers and Provision Dealers'	
Clerks , . 47	\$1,056.25

16.06

\$4,290.55

186

Fourth Division.	
MECHANICS. "A."	
Machinists 35	\$709.21
Plumbers 5	231.64
Printers 3	116.25
Stationary Engineers 7	253.20
Bookbinders 2	42.00
Tinsmiths	10.50
Carriage Makers 2	63.42
Paper Box Makers 3	52.50
Plasterers 2	30.00
Foremen 14	553.78
Cigar Makers	5.00
Cap Makers 2	50.00
Boot and Shoe Makers 11	294.39
Cabinet Makers 2	774.00
Not enumerated 4	92.91
94	\$3,278.80
Mechanics. "B."	
Carpenters 53	\$1,280.29
Granite and Stone Employees 32	780.38
Wood Workers in Mill 26	576.03
Electric Light Employees 15	234.31
Blacksmiths 15	417.98
Paper and Pulp Mill Employees . 14	341.82
Iron Workers 8	144.46
Brick and Stone Masons 7	122.84
Painters 6	123.57
Tub and Pail Makers 7	84.06
Leather Workers	150.00
Scythe Makers	18.75

Roofers . . . .

T B B B M C C C C C H Id Id V S S V	canseous eamstere arkeeper akers . Gilkmen looks . Freamery otton M lotel Em emen . anitors Livery St Vatchme tevedore Vaiters	· · · · · · · · · · · · · · · · · · ·	En yee	ker	· · · · · · · · · · · · · · · · · · ·				 	5 <sup>2</sup> 5 1 7 1 3	\$2,187.14 132.08 12.14 292.50 12.50 31.78 63.57
BB BB M CC CC CC H Id J J S V W B	arkeeper akers. Gilkmen cooks. Greamery cotton M cotel Emer anitors. Givery St. Vatchme tevedore	We ill I plo	orl Em	ker aples	s oye	ees			 	5 1 7 1 3	132.08 12.14 292.50 12.50 31.78
B M C C C C H Id J J E L W S S V W	akers.  Gilkmen  Gooks.  Freamery  Otton M  Hotel Em  Cemen.  Anitors  Livery St  Vatchme  tevedore	· Wolling	orl Em	ker aples	s oye	ees			 	7 1 3	12.14 292.50 12.50 31.78
M C C C H Id J L V S S V	lilkmen looks . Freamery lotton M lotel Em cemen . anitors livery St Vatchme tevedore	· Wolling	orl Em	ker aples	s oye	ees	:		 	7 1 3	292.50 12.50 31.78
C C C H Ic J L V S V	cooks . reamery otton M lotel Em cemen . anitors livery St Vatchme tevedore	ill I plo able	orl Em	ker npl es	s oye ·	ees	:		 	3	12.50 31.78
C C H Id J L V S V V B	creamery otton M lotel Em cemen . anitors sivery St Vatchme tevedore	ill I plo able	orl Em	ker npl es	s oye ·	ees	:		 • •	3	31.78
C H Id J L W S V B	otton M lotel Em cemen . anitors livery St Vatchme tevedore	ill I plo able	En yee	nples	oye	es	:		•	_	
H Id Ja L V S V B	lotel Em cemen . anitors ivery St Vatchme tevedore	plo able	yee •	es	•	:	:		٠	3	63.57
Io Ja L W S V B	cemen . anitors ivery St Vatchme tevedore	able					•				
Ja L V S V B	anitors livery St Vatchme tevedore	able n								3	57.50
L V S V B	ivery St Vatchme tevedore	able n								3	92.50
V S V B	Vatchme tevedore	n	E	m						6	172.13
S V B	tevedore				plo	yee	s			6	57.32
V B			•							3	169.41
В	Vaiters									4	133.20
_										I	32.14
	utlers									1	5.35
В	ottlers' l	Ξmj	olo	ye	es					2	75.00
- I	lay and	Gra	in	E	mpl	loy	ees		٠	1	21.43
N	Turses .						٠			2	67.30
P	oliceme	n								6	127.41
L	aborers									30	525.36
F	armers									30	766.54
F	lailroad	Em	plo	oye	es					42	2,611.15
			-	-					-	212	\$7,645.45
			RI	ΞC	AP	ΙT	UL	ΑΊ	N		
Profess	ional Me	en		"	٧.					45	\$6,880.82
66	6	6		"]	з"					51	2,169.17
Busines	s Men			"	١.					122	11,867.62
46	66			" I	3 "					145	5,390.72
Clerks a	and Sale	sme	n	u j	<b>\</b> "					98	4,487.67
44	6	6		٠٠I	3 "					47	1,056.25
Mechan	ics			u į	1,					94	3,278.80
* 44				" I	3 "					186	4,290.55
Miscella	neous									212	7,645.45
									-	,000	\$47,067.05

These tables show that physicians and surgeons greatly exceed all other professions in the number of accidents, as they also exceed the amount paid for loss of time. The accidents to dentists exceed in amount, because of the fact that this amount covers one accidental death of \$5,000. The dentists ought to be classed with physicians and surgeons, but during the time covered by this exhibit dentists were rated as a better risk than physicians and surgeons. Among the business men the largest number of accidents was to commercial travellers; this occupation is conceded to be among the very best of the preferred or select risks; they are a better risk than physicians and surgeons and better than corporation officers. The amount paid to the bankers is larger than others of the same class, for the reason that one accidental death benefit of \$5,000 was paid to a banker. The number of accidents to occupations, Diagram No. 3, must be compared to the other diagrams, in order to clearly understand the risk of the occupation. The third division - clerks, salesmen, etc .- shows that grocery and provision dealers' clerks received the largest number of accidental injuries, although the amount paid to them was not equal to the amount paid to salesmen (salesmen meaning persons engaged in light counter work). As grocery and provision dealers' clerks are more hazardous risks than salesmen, bookkeepers, etc., they are paid a less amount of indemnity, or, in other words, the cost is greater to the more hazardous class.

In the fourth division, mechanics (A), machinists lead in the number of accidents. They also lead in number insured. It will be noticed that there were two accidents to cabinet makers, amounting to \$774. One of these was an accidental death, amounting to \$750. In mechanics (B), the carpenters lead very largely, this being one of the most hazardous risks in the list of occupations. In the fifth class, miscellaneous, consisting of teamsters, laborers, farmers, etc., teamsters lead in the number of accidents. Of the teamsters, one was for accidental death, amounting to \$750. Of the railroad men, two were killed, amounting to \$1,600.

TABLE OF TOTALS AND AVERAGES.

Occup	ation.	No. Insured	No. Accidents	Amount Paid.	Average Amt.
Prof.	A	476	44	\$1,880.82	\$42.75
"	В	42 I	51	2,169.17	42.53
Bus.	A	1296	121	6,867.62	56.76
"	В	1148	145	5,390.72	37.18
Clerks	A	839	98	4,487.67	45.79
"	В	343	47	1,056.25	22.47
Mechs.	A	829	93	2,528.80	27.19
66	В	767	186	4,290.55	23.06
Miscel.		836	209	5,295.45	25.34
Totals a	nd average	6955	994	\$33,967.05	\$34.17
Acciden	tal deaths	,,,,	6	13,100.00	131-1
	Totals,		1000	\$47,067.05	\$47.06

# RATIO OF ACCIDENTS TO EACH CLASS INCLUDING DEATHS.

Professional men,	Α,	1	in	10.8 n	net with	h an accident.
6.6	В,	I	61	8.2	4.6	46
Business men,	Α,	I	"	10.7	66	64
**	В,	I	66	7.9	66	"
Clerks,	Α,	I	6 6	8.5	4 6	66
64	В,	I		7.3	44	46
Mechanics,	Α,	I	66	8.9	+4	46
66	В,	I	"	4.I	4.6	"
Miscellaneous,		I	66	4.	6.6	"
Grand average,		1	44	7-	4.6	

At the convention of the International Association of Accident Underwriters in 1895, the secretary was authorized to obtain statistics from the different companies as to physicians and surgeons.

At the convention in 1896 the secretary reported having obtained statistical information as to 11,192 physicians insured for one year. This gave five death claims, or one accidental death in every 2,238 physicians and surgeons insured, one loss of limb claim in 5,596, and 965 indemnity claims, amounting to 2,710 weeks, or one indemnity claim to every 11.8 persons insured, with an indemnity claim averaging 2 weeks and 6 days duration. The indemnity claims were divided as follows:

Dislocations		•			39
Sprains .			•	•	235
Contusions an	d br	uises		•	314
Septic wounds	3			•	54
Fractures			•		89
Cuts .					82
Lacerations		•			85
Miscellaneous					67

In 1897 the secretary of the same association, at its tenth convention, reported upon grocers, editors and carpenters, showing that in grocers, office and supervising only, which is a Class A risk, the number insured for one year was 1,664.

The average duration of claim was two weeks and four days.

7.8 per cent. of persons insured met with an accident.

Grocers, supervising, light counter work, Class B risk:

The number insured for one year was 2,376.

Average duration of claim, 2 weeks and 2 days.

Per cent. of insured injured each year, 6.3. One in 2,376 killed.

Grocers, general store work and driving, Class C risk:

The number insured for one year was 813. Average duration of claim, 2 weeks and 1 day. Per cent. of insured injured each year, 14.4.

## Butchers, market and stall:

The number insured for one year was 2,782. Average duration of claim, 2 weeks. Per cent. of insured injured each year, 15.7.

# Butchers, slaughtering;

The number insured for one year was 592. Average duration of claim, 2 weeks and 2 days. Per cent. of insured injured each year, 31.1.

# Editors and reporters:

The number insured for one year was 1,006. Average duration of claim, 2 weeks and 4 days. Per cent. of insured injured each year, 8.4.

## Carpenters:

The number insured for one year was 5,047. Killed, 4.
Loss of limb, 1.
Indemnity claims, 1,270.
Average duration of claim, 3 weeks.
Per cent. of insured injured each year, 25.2.
I accidental death in 1,212.

### DIAGRAM No. 6.

On the opposite page we give an exhibit of the nature of injuries, number, amount and averages of the nine hundred and ninety-four non-fatal consecutive accidents herein analized.

The miscellaneous injuries given in the diagram consist of one gun shot wound, amounting to \$75.00, two concussions of the spine, amounting to \$925.00, two poisoned, \$8.00, two periostitis, amounting to \$70.00, six synovitis, \$387.56, two cellulitis, amounting to \$40.00.

Slightly over one-fourth of the accidents were contusions and bruises. This agrees with the experience of most, if not all, the accident companies or associations in the United States. These injuries covered nearly all parts of the body. Sprains come next in order. These were largely sprains of the ankle and wrist.

Averages.	\$48.09	100.37	26.53	65.62	30.29	39.58	72.26	25.60	23.89	26.24	34.09	28.07	34.17
								1					
No.	<u>*</u>	52	7.7	36	30	34	65	76	123	731	203	253	766
Amr No.	\$ 673.21 14	1,505.56	046.77	1.706.29 26	908.92	1.345.86	4,696.90	1,945.95	2,938.36 123	3,436.94 131	6.921.71 203	7,240.58 253	33,967.05 994
	Amputations	Miscellaneous	Conjunctivitis	Dislocations	Crushing Wounds	Burns & Scalds	Fractures	Punctures	Cuts	Abraisions & Lacerations	Sprains	Contusions & Bruises	

## DIAGRAM No. 7.

On the opposite page we give an exhibit of the 1,000 consecutive accidents, fatal and non-fatal, showing where the accidents occurred or what the insured were engaged in at the time of the accident, with the number, amount and averages,

90.74	\$ 12,507.91 434 47,067.05 1000	Eng a Occu. a rrojessions 12,507.91 434 47,067.05 1000
34.47	5,274.34	About House & Grounds
47.37	5,780.31 122	Due to Horses
46.23	5,363.73	On the Street
127.42	les 14,560.37 114	Eng'd Amusements & Bicycles 14,560.37
78.46	2,510.92	Rail-Road Employees
32.82	656.44 20	In the Office
\$35.89	\$353.03 9	Miscellaneous
Averages.	Amount No.	DIAGRAM No. 7.

An analysis of one thousand accidents occurring during the winter in one of the largest companies in the United States, doing a large railroad business, gives the following description "of where the accident occurred, or what the insured were doing at the time of the accident." It will be noted that a smaller percentage of accidents occurred in amusements, including bicycling (due to the season of the year covered), than in the presentation we have made of the one thousand consecutive accidents. The smaller number, due to horses, is probably due to the same reason.

Amusements, including bicyc	les	,	42
House and grounds .		•	133
Office			29
On the street			123
Occupations and professions			321
Accidents to R.R. employes			181
Accidents to passengers, etc.			77
Horses			55
Miscellaneous			39
		-	
			1000

A more complete idea of the cause of accidents can be had by an examination of the following table:

# TABLE OF HOW THE ACCIDENTS OCCURRED. Division No. 1.

ACCIDENTS OCCURRING WHILE ENGAGED IN AMUSEMENTS.

	No.	Amount,
Bicycling	. 6o	\$2,740.03
Collision of bicycle with team .	. 1	5,000.00
Cleaning bicycle	. 9	273.09

Playing amateur baseball					8	\$319.85
Playing basket ball					4	111.96
In bathing, seashore						210.79
Exercising in gymnasium					4	69.46
Exploding firecrackers .					5	148.05
Getting in and out of saill	ooat	t.			2	137.50
Bowling			٠	•	2	33.57
Dancing					2	70.00
Handling rifle					2	87.50
Fishing					I	80.00
Drowned while fishing .			٠	٠	I	5,000.00
Fell down stairs at theatre					1	75.00
Coasting on sled	•		٠		I	27.86
Skating			٠	•	I	20.00
Curling on ice	٠	٠			I	15.00
Playing pool			٠	•	I	30.00
Playing lawn tennis			•		I	35.71
Putting up a tent			•	٠	I	25.00
Running and jumping .			•		I	45.00
Wrestling		٠	•		I	5.00
				1	14	\$14,560.37

## Division No. 2.

# ACCIDENTS OCCURRING ABOUT HOUSE AND GROUNDS.

Fell down stairs				47	\$1,999.76
Chopping wood at home				14	260.22
Stepped on nail at home.				8	316.56
Raising window at home				7	193.57
Attending furnace at home				5	127.72
Handling material about ho	use	•		5	125.17
Cutting meat at home .			٠	4	117-35
Kindling fire at home .				2	44.64
Extinguishing fire in house				4	285.00
Trimming grape-vines .			•	2	20.00
Ran into barbed-wire fence				2	35.00
Slipped on piazza				2	105.71

Slipped on icy steps 2	\$100.00
Lighting hall light	8.57
Chair tipped over	10.00
Caught foot in dressing gown I	25.72
Caught toe on tin in bath tub I	20,00
Turning hot water from kettle . I	10.00
Making tea	25.00
Filling coffee-pot	64.28
Cutting a cord on a bundle 1	10.70
Burnt hand on stove 1	15.00
Lamp tipped over	42.86
Putting on trousers	37.50
Putting up a bed 1	16.06
Tripped over a rug 1	45.00
Cleaning fish at home	20.00
Oil stove tipped over	50.00
Laying down a carpet	5.71
Putting up a folding bed 1	61.85
Opening a bottle of ginger ale 1	12.50
Opening bottle, a cork screw slipped 1	17.86
Stepped on glass bottle 1	15.00
Door slammed on hand I	20.00
Slipped in going into closet 1	32.14
About house in dark I	28.57
Lifting sick wife in bed 1	25.00
Turning over in bed	37.50
Burned while smoking cigar 1	25.00
Caught hand in chair 1	11.43
Cutting meat for a dog 1	20.00
Filling hot water bag 1	37.50
Cutting bread at home 1	7.50
Removing over-shoes 1	90.00
Burned with kettle of hot fat 1	90.00
Scratched by a cat	71.42
Struck hand against board 1	10.71
Putting hot water in tub 1	30.00
Washing machine, fell 1	40.94

Sharpening skates	\$6.00
Struck foot against coal shovel 1	18.75
Fell over clothes pole	50.00
Struck by a feather duster 1	25.00
Playing with child 1	100.00
Running a lawn mower 1	25.00
Washing windows	30.00
Opening barrel 1	8.57
Mending hen-coop 1	12.50
Burned on stove pipe	87.50
Shovelling snow	4,00
Opening barn-door 1	25.00
Boring hole in a barrel 1	60.00
152	\$5.254.24
153	Ψ51474.34

# Division No. 3.

Accidents Occurring	ON	Acco	UNT	OF	HORSES, ETC.
Thrown from carriage				54	\$3,186.82
Kicked by horse .				23	774-21
Knocked down by horse				15	763,13
Bitten by horse .				4	236.60
Alighting from carriage				4	98.75
Getting into carriage				6	267.50
Stepped on by horse				10	195.52
Riding horse-back .		•	•	4	162.78
Clipping horse .				I	7.50
Shoeing horse .				I	87.50
			_		
			1	22	\$5,78031.

## Division No. 4.

#### Accidents Occurring in Office.

Closing office door .			4	\$99.50
Opening or closing vaul	t and	safe		
door			4	78.91
Slipped on office floor .			3	209.28
Fell from stool			I	27.00
Taking down books .			I	20.00
Standing on chair, fell .			I	40.00
Box fell on leg .			I	37.50
Struck in eye by door .			I	25.00
Lifting books in bank .			1	30.00
Opening glass door .			I	56.25
Caught hand in electric fa	n.		I	18.00
Sitting on stool, stool brol	ke .		1	15.00
		-		
			20	\$656.44

# Division No. 5.

# Accidents Occurring on the Street.

Slipped on ice .				47	\$2,112.82
Slipped and fell (various	cause	s)		38	1,661.73
Slipped on banana peel				2	62.14
Getting off cars .		•		9	387.50
Getting on cars .				4	88.00
Climbing over wall				3	90.30
Knocked down by a bicy	cle			3	136.43
Bitten by dog .				6	241.24
Struck by gate on R.R. o	rossi	ng		I	15.00
Ice fell from building	•			I	23.57
Fell over hoop-skirt	•			I	500.00
Stepped into hole in side	walk		•	I	45.00
			_		
			1	16	\$5,363.73

## Division No. 6.

## ACCIDENTS OCCURRING TO OCCUPATIONS.

Handling tools .				66	\$1,858.72
Operating machinery				5S	1,408.86
Handling materials				55	1,372.80
Struck by falling obje	ect .			51	1,250.75
Fell at work from st	aging,	ladde	rs,		
platforms, etc				72	2,366.67
Struck by flying obj					
pieces of slate an	d stone	, amo	ng		
the granite work	ers .			28	877.64
Stepped on nail .				22	357.62
Chopping wood .				10	155.79
Fell down stairs .				7	190.35
Running snow ploug				2	55.78
Handling ice				2	31.25
Fell through hole in	floor			9	205.72
Flash light explosion	s .			2	146.43
Scalded by hot water	escapir	g		1	25.00
Killed by carpet mach	ninery			I	750.00
Dressing wound by n	urse			I	7.50
Performing operation	is, phys	ician	s.	9	338.57
Fireman fell from sli	ding po	ole		I	22.50
Ejecting man from sa	loon			τ	15.00
Bitten by a man in sa				I	25.71
Assisting to arrest	a man	, pol	ice		
officer		•		I	75.00
Milking a cow .			•	I	15.00
Thrown down by a co	w.			I	9.98
Killing a hog at hom	е.	•		I	10.00
Cow switched tail in	eye			I	7.50
Hanging up string of	f corn	•		1	50.60
Uninumerated accide	nts	•	•	29	937-17
Total,				434	\$12,567.91

## Division No. 7.

## Accidents to Railway Employees.

Run over by train					2	\$1,600.00		
Fell at work .					15	318.78		
Miscellaneous		•			15	592.14		
Total .				_	32	\$2,510.92		
	$D_i$	visio	n No	. 8.				
	Mı	SCELI	LANE	ous.				
Contact with gas a	t dei	ntiet's			ı	\$57.14		
Caught on elevator			' ·		ı	12.50		
Poisoned while v					•	12.50		
		_				8.00		
woods .					2	0.00		
Bitten by a racco				ıng				
with it .				•	I	10.00		
Opening can of na	phth	a			I	37.50		
Cut by beer glass v	vhile	in sa	aloon		I	30.00		
Assaulted and robbed while acting as								
watchman					I	135.00		
Slipped in saloon					I	62.89		
					_			

## RECAPITULATION.

\$353.03

Total . . . . 9

Amusements, including bicycle	s . 114	\$14,560.37
About house and grounds .	. 153	5,274.34
Account of horses, etc	. 122	5,780.31
In office	. 20	656.44
On the street	. 116	5,363.73
Occupations	• 434	12,567.91
Railway employees	. 32	2,510.92
Miscellaneous	. 9	353.03
Total	1,000	\$47,067.05

Dividing these into exposures of occupation, and common and particular risks and exposures, we

	No. of A	Accidents.	Amount Paid.
Exposures of occupation .		434	\$12,567.91
Exposures of railroad employ	ees.	32	2,510.92
Exposures in office .		20	656.44
On account of horses .		71	2,416.38
Total Exposures of occup	ation	557	\$18,151.65

## COMMON AND PARTICULAR RISKS AND EXPOSURES.

	No	of A	ccidents.	Amnunt Paid.
Amusements, including bicy	cles		114	\$14,560.37
About house and grounds			153	5,274.34
On the street	•	•	116	5,363.73
On account of horses .		•	51	3,363.93
Miscellaneous			9	353.03
Total amount of common				
particular risks and exp	osur	es	443	\$28,915.40
Grand Total .		. 1	,000	\$47,067.05

Of these amounts, the largest was paid to amusements. This is due to the fact of two accidental death claims, of \$5,000 each, one of which was due to the collision of a bicycle with a team, and the other to drowning while fishing from a boat. The next in order of amount is occupations and professions; that is, while the insured were performing the duties of their occupation or profession. The number of accidents in this division is 43.4 per cent. of the total number. Two of these were accidental deaths of \$750 each. The largest number of acci-

dents was due to exposures of occupations and the largest amount was paid on account of common and particular risks and exposures.

The following table shows the averages paid for 10,000 accidents occurring in one of the oldest accident companies, a company that writes policies as high as \$20,000 accidental death benefit, and \$100 weekly indemnity. The grand average was \$66.81, or \$19.76 higher than the grand average in our illustration of 1,000 accidents. This difference is due to the fact of a larger death benefit and larger weekly indemnity.

#### TABLE OF AVERAGES.

			Averages.
Manual labor and trades			. \$40 95
To pedestrains,			. 88.28
Horse and vehicle,			. 107.88
Street railway and elevator	rs,		. 141.91
Bicycle			. 55.39
At home			. 57.52
Burns and scalds			. 28.65
Drowning			3,582.14
Firearms and explosions			. 402.74
Bites of animals			. 37.79
Sports and recreations .			. 77.63
Foreign substance in eye			. 21.67
Steam railroads and steam	sh	ps	. 310.15
In office and store			. 69.19
Unclassified			. 65.29

#### 1000 Consecutive Accidents according to Ages.

		No. Insured.	Accidents.	Am't Paid.
Between	18-20	283	58	\$1,070.12
4.6	21-24	390	82	2,016.24
66	25-29	775	158	4,945.81
**	30-34	838	141	4,429.26
6.6	35-39	994	143	4,955.76
44	40-44	1017	134	5,720.13
44	45-49	973	101	4,108.77
"	50-54	790	87	8,420.20
4.	55-59	445	54	7,633.17
4.6	60-64	357	34	2,511.31
66	65-69	93	8	1,256.28
Totals,		6955	1000	\$47,067.05

#### OF THE ABOVE, THERE WERE

1 а	ccidental	l death,	\$5000.	Age	50	years
I	66	4.6	5000.	66	57	"
I	46	64	1000.	66	63	"
I	41	6.6	750.	66	26	· 41
I	66	4.6	750.	44	66	"
I	4.6	4.6	600.	"	40	4.6

#### RATIO OF ACCIDENT ACCORDING TO AGES.

Between the ages of 18-20, I in 4.9 met with an accident 46 66 66 21-25, 1 " 4.9 25-29, I " 4.9 30-34, 1 " 5.9 " 35-39, I " 6.9 40-44, I " 7.6 4.6 66 66 4.4 45-49, I " 9.6 50-54, I " 9.1 64 4.6 44 66 55-59, 1 " 8.2 4.6 60-64, 1 " 10.5 66 44 66 46 16 65-69, 1 " 11.6 66

1000 CONSECUTIVE ACCIDENTS BY STATES.

	No. Insured	No. Accidents	Amount.
Maine	806	131	\$4,704.16
New Hampshire	220	40	1,227.33
Vermont	1113	305	9,472.25
Massachusetts	3142	323	18,159.35
Rhode Island	303	28	1,471.17
Connecticut	417	61	1,946.24
New York	156	22	6,266.45
Pennsylvania	93	12	364.21
District of Columbia	436	38	2,145.00
Other States	269	40	1,310.89
	6955	1000	\$47,067.05

The accidents in the other states occurred in Ohio, California, Colorado, Wisconsin, Minnesota, Maryland, New Jersey, New Mexico, Missouri, Florida, Georgia, Nova Scotia, and Province of Quebec.

#### AVERAGE OF STATES.

Maine	1 а	ccident	to abou	ıt 6 pei	rsons insured	ì
New Hampshire	ī	6.6	4.4	5		
Vermont	r	44	46	4	"	
Massachusetts	1	66	4.6	10	"	
Rhode Island	I	4.6	66	11		
Connecticut	r	6.6	4.6	7	6.6	
New York	1	44	£	7	"	
Pennsylvania	I	6.6	66	8	t c	
District of Columbia	I	* *	4.4	11	"	
Other States	1	44	. 4	6	66	

In New Hampshire and Vermont, the proportion of farmers and hazardous risks is in excess of other states, while in Rhode Island almost all of the exposed risks herein presented are select or preferred risks, and in Massachusetts, the greater proportion are among these select and preferred risks, A and \*A.

1000 CONSECUTIVE ACCIDENTS.

Length of Disability.						
One week	k and le	ess	188			
Between	I- 2 W	reeks	367			
6.6	2- 3	"	202			
44	3- 4	4.6	96			
44	4- 5	4.6	53			
+ 6	5- 6	66	31			
6.6	6- 7	**	16			
4.6	7-8	4.6	ΙI			
	8- 9	4.6	6			
4.6	9-10	4.6	2			
6.6	IO-II	4.6	6			
6.6	11-12	6.6	4			
4.6	12-13	4.4	3			
4.6	14-15	4.4	I			
6.6	15-16	4.4	I			
66	16-17	4.6	2			
4.4	18-19	44	I			
4.6	20-21	, 4	2			
44	21-22	+ 6	I			
"	22-23	**	I			
			994			

making a total of 2,487 weeks, or an average of about 2 weeks and a half to each accident.



#### CHAPTER III.

ACCIDENTS TO RAILROAD PASSENGERS, EMPLOYEES,
TRESPASSERS, ETC.

The report of the Railroad Commissioners of the Commonwealth of Massachusetts, for the year ending June 30, 1899, shows the number of fatal and non-fatal accidents to passengers, employees, trespassers, etc., as follows:

#### RAILROAD ACCIDENTS.

			Fatal.	Non-fatal.
Injuries to passengers		•	10	195
Accidents to employees	•		63	527
Accidents at grade cross	ings	and		
stations			34	42
Accidents to trespassers			105	96
Totals .			212	860

The average number of injuries per year for the last ten years was 1,040, an average of 134 to passengers, 584 to employees, 82 at grade crossings and stations, 240 to trespassers. Average number of fatal injuries 259, non-fatal injuries 781.

The average number of passengers killed per year, 17; average number of employees killed per year, 71; average number of non-fatal, 513; average number killed at grade crossings and stations, 34;

non-fatal accidents, 48; trespassers, average number, fatal injuries, 134; average number non-fatal, 106. Total number of railroad employees in Massachusetts, for 1899, was 51,881. Showing that one in every 88 of the employees met with an injury. One in nine of the injured were killed.

#### STREET RAILWAY EMPLOYEES.

Passengers killed		5					
Injuries to persons on street, fatal	•	32					
Total	•	48					
Non-fatal injuries to passengers .		1,605					
Non-fatal injuries to employees .		67					
Non-fatal injuries to persons on street	•_	768					
Total	•	2,440					
An increase over the year 1898 of:							
Passengers, fatal		2					
Passengers, fatal Employees, fatal		3					
3 /	•						
Employees, fatal	•	3					
Employees, fatal	•	3					
Employees, fatal Persons on the street, fatal . An increase of non-fatal injuries to:	•	3 5					

Making a total of 275 persons injured more than the preceding year. Total number of street railroad employees, 11,944. It therefore appears that one in every 166 street railroad employees met with an accident.

It is understood that, in reference to steam and street railway employees, that officers, clerks, ets., are included.

In Great Britain, the number killed per one hundred miles is  $2\frac{140}{100}$ , while in Massachusetts the number is three in 100 miles. The number of non-fatal injuries to employees in Great Britain is 20 to 100 miles; in Massachusetts, 25 to 100 miles.

The Bulletin of the Department of Labor, No. 20, January, 1899, gives a very interesting table of the number of railway employees killed and injured on British railways, from 1874 to 1895, inclusive, by which it appears that 10,755 were killed and 50,027 injured in twenty years, and that, in 1874, one in every three hundred and seventeen was killed, and one in every eighty-nine injured, out of a total of about 250,000 persons employed; while, in 1895, such improvements had been made that only one in ten hundred and fifty-two was killed, and one in one hundred and seventy-five injured, out of a total number of 465,112 employees.

The Bulletin well says: "Despite the decrease in the proportion of persons killed and injured, the employees feel that not enough has been done to diminish the great waste of human life in railway work."

The thirteenth annual report of the Interstate Commerce Commission, under date of January 15th, 1900, gives the total casualties to railway employees for the years 1893 and 1899, inclusive, from which we extract the following:

TABLE OF RAILWAY EMPLOYEES, NOT INCLUDING STREET RAILROADS, KILLED AND INJURED.

					•
		Killed.	Injured.	Total.	No. Employed.
1893		2,727	31,729	34,456	873,602
1894		1,823	23,422	25,245	779,608
1895	•	1,811	25,696	27,507	785,034
1896		1,861	29,969	31,830	826,620
1897		1,693	27,667	29,360	823,476
1898		1,958	31,761	33,719	874,558
1899		2,220	35,210	37,430	Not given.
Total,	7 ys.	14,093	205,454	219,547	

The number of casualties to passengers is not given for the year 1899.

For the year ending June 30, 1898, the number of passengers killed was 221, and the number injured was 2,945. Other persons, not passengers or employees, number killed, 4,680; injured, 6,176. Of the last class, 4,063 killed and 4,749 injured, were termed trespassers. The number of employees killed was 1,958, injured 31,761, making a grand total of 6,859 killed, and 40,882 injured.

The Railway Officials and Employees Accident Association, of Indianapolis, Indiana, with 20,582 policies in force December 31, 1899, paid \$524,516 or an average of \$12.87 to each person insured. The average policy in this company, according to their reports, is \$1,415. The number of claims paid is not given. But taking our steam railroad employees' average of one accident to each four persons insured, the average claim would be \$51.48.

As the total number of railway employees killed and injured for the year 1899 was 37,430, the indemnity, at the above rate, would have amounted to \$1,926,896.40; and for the seven years given in the preceding table, the indemnity would have amounted to \$11,302,179.56.

When the young men of the country are called to go forth to war, they march through our streets with flags flying and bands playing inspiring music. The people crowd the streets and applaud them as they march onward toward the battlefield. When the news of a battle is received, the whole people are sad at the story of the young lives destroyed. Those who thus die are honored for their heroism, and monuments are erected to their memory. Be the war in which they are engaged worthy or unworthy, they properly bear no odium. Many of those who return are pensioned for injuries received.

Not so the army of young men who go forth daily to duty upon our railroads. One in every eighty of them will be disabled, and one in every nine of the injured will be killed. 37,430 railroad employees are injured in one year, of which 2,220 are killed. They pass away, unknown and unhonored, save to their families and friends.

The slaughter continues, and the people are not sufficiently awake to their duty in demanding protective legislation. Safety appliances that could do something to lessen the number of injuries are sometimes kept from use, that dividends may be accumulated.

The insurance companies can do but very little, because of the great hazard of the calling. The trade unions are practically their only friends and protectors.

It must be remembered that many injuries to railroad employees are not reported to the railroad commissioners. In some cases the pay of the employee continues, but even if the pay does not continue, the employee prefers to make no complaint, fearing it may endanger his continuance in the employ of the road. The railroad commissioners have no rule as to the reports of the railroad companies for non-fatal injuries.

The introduction of safety appliances have somewhat reduced the number of accidents. Upon this subject the Interstate Commerce Commission say:

"It is believed that the number of killed and injured, by falling from trains, must be very largely reduced when the train brake comes into general use. The men will not then be obliged to use the tops of cars for braking, nor to walk on the running boards. The freight train will be as completely under control of the engineer as passenger trains are at the present time. The number of killed and injured from this cause is as great as, if not greater than, the number of killed and injured in coupling and uncoupling cars."

The commissioners then give their conclusions as to the cause of the large number of injuries which still result to steam railway employees. They say that, "with the increasing number of those in service an increased percentage of inexperienced men have been employed." The increase in ton mileage from 1894 to 1898, was 94,950, and the commissioners say, "this great increase of traffic has been carried by means of heavier equipment, with an average of fewer men to the mile than were employed in 1893. The number of tons carried per man employed has increased 152 tons per mile.

"The demands of reviving business have called into use cars, which, because of their inferior character, had long been allowed to remain upon sidings." "A train of cars having in it an inferior car, with old or insufficient couplings, unfitted for use with powerful locomotives and heavy cars, is like the chain which is no stronger than its weakest link." "Cars which might have carried their loads safely enough in a train of cars of like character, become sources of weakness and danger when placed between cars having so much greater weight and carrying capacity. The disastrous accidents to trainmen which followed are certainly not to be charged to the adoption of the automatic coupler."

"Until such time as all the rolling stock shall be equipped with the required safety appliances, and the same are maintained in perfect working order, the full benefits and advantages of the law can not be fully realized."

There is no doubt but that the inexperienced men are much more liable to accident than the experienced; but railroad business, at its best, is a hazardous occupation. The reckless bravery that is often shown by inexperienced soldiers in the battlefield is often exhibited in the railway service. The commissioners say: "Carelessness of this sort has been greatly discouraged through membership in beneficial organizations of railway men, whereby each suffers a pecuniary loss in case of injury to a fellow-member."

"At the date of our last annual report the commission believed that the number of casualties to railway employees would continue to diminish. We had previously expressed the opinion, in former reports, that until all cars were equipped, the advantages of automatic couplers, as a means of protection to employees, would not be demonstrated by a falling off in the number of those killed and injured in coupling and uncoupling cars; and that view now seems to find support in the showing of casualties for the year ending June 30, 1898, when the number killed was 279, and the number injured was 4,988. While I employee was killed out of every 349 employed in 1893, and in 1897 the number was I killed to 647 employed, the figures were I killed to 518 employed in 1898. The ratio of the injured to those employed was 1 in 13 in 1893, 1 in 22 in 1897, and 1 in 21 in 1898. In 1899, for which year full returns have not been made, it is found that 199 were killed and 5,339 injured upon S9 roads, while in 1898, on the same roads, 209 were killed and 5,484 were injured.

"It must be borne in mind that these were injuries resulting to trainmen other than engineers and firemen, and include switchmen, flagmen and watch-

men. Flagmen and watchmen are not engaged in coupling cars, but from long practice of the roads, they have been classified with the switchmen. It is hoped that this anomalous classification will be done away with, and efforts to that end are now being made.

The number of employees killed and the number of employees injured by falling from trains for the year ending June 30, 1898, were 473 killed and 3,859 injured. For the year ending June 30, 1893, 644 were killed and 3,780 injured."



## CHAPTER IV.

ACCIDENTS IN RELATION TO CIVIC AND ECONOMIC OBLIGATIONS AND CONDITIONS.

Availing ourselves of the data at hand regarding accidents in Massachusetts and New York, also of the exhibit as to accidents contained in the last census of the United States, we are able to present the following facts and conclusions:

The census of Massachusetts for 1895 gives the total population of the State as 2,500,183. Of this number 971,082 were persons under 20 and over 70 years of age, leaving 1,529,101 persons of insurable age. Taking the average number of accidents for each 1,000 insurable persons between 20 and 70 years of age, as one in seven, we would have 218,443 accidental injuries for which claims would be made. At \$47.06, the average amount paid for accidents, we would have a total loss amounting to \$10,279,927,58.

The classified occupations were given as follows:

		Males.	Females.	Both sexes.
1	The State	1,214,701	1,285,482	2,500,183
2	Government	17,240	2,855	20,095
3	Professional	23,845	20,170	44,015
4	Domestic service	14,877	636,982	651,859
5	Personal service	25,724	19,762	45,486
6	Trade	129,875	24,142	154,017

	-			
7	Transportation	69,680	<b>3</b> 68	70,048
\$	Agriculture	37,281	275	37,556
9	Fisheries	8,813	18	8,831
10	Manufacturies	349,546	142,951	492,497
11	Mining	2,367		2,367
12	Laborers	98,758	207	98,965
13	Apprentices	5,320	567	5,887
14	Children at work	3,223	2,312	5,535
15	Scholars	209,672	212,066	421,738
16	Students	9,808	7,353	17,161
17	Retired	28,121	17,659	45,780
18	Not gainful, etc.	573	194	767
19	Not productive	25		25
20	Unemployed, 12 mos.	7,320	1,019	8,339
2 I	Dependents	180,11	12,778	23,859
22	At home	147,659	148,947	296,606
23	Not stated	13,893	34,857	48,750

The insurable risks in these occupations would be:

Government, b	oth	sexes			20,095
Professional, b	oth	sexes			44,015
Domestic servi	ce,	males o	only		14,877
Personal servic	e				45,486
Trade .					154,017
Transportation					70,048
Agriculture			•	•	37,556
Manufactures					492,497
Laborers					98,965
Total		,			977,556

Of this number 139,651 would meet with accidental injuries, amounting to a loss of \$6,571,976.06 to persons engaged in gainful occupations, not in-

cluding apprentices, female domestic servants, persons engaged in fisheries, mining, etc. Female domestic servants are omitted from this tabulation, because of lack of sufficient data in reference to the number of accidents and length of disability. If the same proportion of accidents held good, there would be 90,997 accidents to domestic servants, and estimating their average loss at \$30, we would have an additional loss of \$2,729,910.

The fisheries, mining and apprentices would furnish 2,440 additional accidents, amounting to \$114,-826.40, making a grand total of 233,088 accidents annually, amounting to \$9,517,712.46. The difference between this number of accidents and that given as accidents to all persons between 20 and 70 years of age is due to the fact that, in occupations under manufactures, a large number of persons employed would be under 20 years of age, as were doubtless some of the apprentices. The difference in the amount between these two estimates is due to the fact that we computed the amount paid under the first proposition to be \$47.06, while, owing to the lack of statistical data in the matter of accidents to women, we have estimated the cost per accident to the females engaged in domestic service at \$30 each.

A computation of the number of males only from 18 to 70 would give us 845,749 persons. According to the experience heretofore given, there would be 120,821 accidental claims, amounting to \$5,685,836.-26.

#### ACCIDENTS IN NEW YORK.

Commissioner McMackin, of the Bureau of Labor Statistics, New York, in giving the result of some investigations into industrial accidents made by the Bureau for the months of April, May and June, 1899, "Among the million workers in the factories and shops of New York State, probably 700 toilers last year met their death through accidents; such, at least, is the result obtained by applying the percentages of accidental injuries worked out in the European countries that have been keeping careful records for many years. Nor does this number include the fatal accidents to employees of the railways of the State, of which the State Board of Railroad Commissioners reported 210 in the year ended June 30, 1899. Contrast these numbers with the total number killed in the American armies during the recent war with Spain, namely 280, and one obtains some conception of the dangers uncomplainingly met by the people in the regular pursuit of their occupations."

"But the foregoing figures relate only to fatalities and convey no idea of the amount of crippling, maiming and wounding of the industrial workers that occur every year. There are probably not fewer than 40,000 injuries, all told, sustained by the working people engaged in the manufacturing industries of this State. Many of these injuries were trivial, entailing little less of time. But, on the other hand, the number of serious injuries were considerable.

Judging from the experience of Germany, there could not have been fewer than 6,000 injuries that entailed disablement for a period in excess of three months. The total number of American soldiers wounded in the war with Spain was only 1,577."

Mr. McMackin's report covers 452,425 employees engaged in the following occupations:

Stone and clay products.

Metals, machinery and apparatus.

Wood.

Leather, rubber, pearl, etc.

Chemicals, oils and explosives.

Pulp, paper and cardboard.

Printing and allied trades.

Textiles.

Clothing, millinery, laundering, etc.

Food, tobacco and liquors.

Public utilities.

Building industry.

This table gives scarcely half the number engaged in manufacturing industries in the State, and although these figures show four times as many accidents as those reported to the factory inspectors, it does not give a correct idea of the number of accidental injuries received. We therefore have omitted his table.

The report continues: "The rate per 1,000 is absurdly low, when compared with German and Austrian results; whereas, the accidents on American railways, more carefully reported to the authori-

ties, are much more numerous than they are in Europe."

"The number of accidents per thousand is very misleading, judging from the European accident statistics and from the rates of the accident and employers' liability insurance companies."

Of the accidents reported, the following table shows the nature of injuries:

Fatal					29
Loss of eye					8
Loss of one limb .					2
Loss of both limbs					I
Internal injuries .					28
Injuries to head and face	е				190
Injuries to arms and har					329
Injuries to fingers					637
Injuries to legs and feet					368
Injuries to other parts	of	body,	or s	eve-	
ral parts .					195
Nature of injury unknow	vn				35
, ,					
Total					1,822

This table shows that injuries to the fingers are greatly in excess of injuries to any other part of the body, which confirms the figures heretofore given.

The extent of the injuries sustained, measured by the time lost, shows that there was a per capita average of about two weeks to each injury.

The report deals very fully with the action of the

2,103,220

State for the prevention of accidents, liability of employers, the breakdown of liability laws, the doctrine of common employment, and then, speaking of the cost of compensation, says: "Certain grave objections may be urged against liability insurance, as it is at present carried out. The employer is less disposed to introduce and maintain safeguards about machinery, upon the recommendation of State inspectors, saying he pays the insurance company for assuming his risk."

### ACCIDENTS IN THE UNITED STATES.

According to the United States census of 1895, there were 17,431,102 males, between the ages of 15 and 64, divided in gainful occupations as follows:

## AGRICULTURE.

15 to 24

25 to 24

25 to	34	•	•	•	•	•	1,953,051
35 to .	44		•				1,518,619
45 to	54					•	1,154,085
55 to	64					•	779,175
Г	`otal						7,508,750
	DOMES	STIC	AND	PERS	ONAL	SERV	VICE.
15 to	24						709,066
25 to	34						781,672
35 to	44			•			518,998
45 to	54		•	٥			337,556
55 to	6.			٠			181,285
23,00	04	•	•	•			,3

Ī							
	MANUFACT	URING	AND	ME	CHANIC	CAL	INDUSTRIES.
	15 to 24						1,026,114
	25 to 34						1,122,554
	35 to 44					٠	818,324
	45 to 54		•		•		555,172
	55 to 64	•	•	٠	٠	•	313,414
	Total						3,835,578
		PROF	essio	NAL	. SERV	ICE.	
	15 to 24						90,997
	25 to 34	•	•				185,535
	35 to 44		•	•			147,757
	45 to 54			٠			106,210
	55 to 64	٠	•	•	•	٠	61,464
	Total						591,963
	TR.	ADES .	AND '	TRA	NSPOR'	ГАТ	ion.
	15 to 24						832,461
	25 to 34						946,402
	35 to 44						622,658
	45 to 54						385,436
	55 to 64						179,277

Taking the same average number of accidents and the same average amount paid, as in our tables of 1,000 consecutive accidents, we should have 2,490,157 accidents annually, amounting to \$117,-186,782.42.

. 2,966,234

Total

We regret that we are unable to present the statistics of accidents of the several States in the Union in any form that would permit a comparison as to any difference that may exist in risks of classified occupations. A well-known insurance man has said, "hazards differ materially in the several States by reason of the difference of laws and the difference in social conditions." This statement is doubtless correct: but we believe that material differences exist consequent upon industrial conditions. Interstate Commerce Commissioners, in their report, say that membership in railroad trade unions has greatly discouraged carelessness. They might, with truth, have asserted that membership in these unions has tended to encourage carefulness, and has led them to agitate for and assist in securing laws for their better protection. Where working men are so careless of their own interests as to keep out of their associations, they become indifferent to matters of legislation looking to their protection.

An examination of the table of accidents by States, on page 58, shows that Vermont leads in the number of accidents. This is the experience of all the companies who have done business in that State. Probably a larger proportion of the farmers in Vermont are insured than in any other State; and again, a large number of the persons insured are workers on stone, a hazardous occupation. But it is equally true that men insured in A, \*A and B classes in Vermont are not as good risks as men in the same business in Massachusetts.

Taking the average loss of time at two weeks and a half per person injured, we should have a total loss annually of 6,225,392 weeks, or 119,719 years, or a loss of productive capacity of 100,000 men for one year, ten weeks and one day; or a loss of six weeks and one day of productive capacity to one million men annually. This would show an average loss to each male person between the ages of fifteen and sixty-four, of two and one-half days' time each year.

After making all possible deductions and discounts, the aggregate loss of time and consequent loss of productive capacity in consequence of accidental bodily injuries, would amount annually to from \$30,000,000 to \$50,000,000, estimating the earnings at an average of \$10 per week for all the persons enumerated as males between fifteen and sixty-four years of age.

Thus it will be seen that in a matter so dependent upon civic and economic conditions, and so affecting materially a large per cent. of citizens, it becomes the duty of both the State and United States governments to give the most careful attention to all matters relating to accidental injuries, and the cause and prevention thereof.

## CHAPTER V.

COMPARISON BETWEEN THE LOSS CAUSED BY FIRES
AND THE LOSS CAUSED BY ACCIDENTS.

The Fire Marshal of Massachusetts, in his report of 1896 gave the total number of fires occurring throughout the State for the year 1895, as 3,606, the loss amounting to \$5,307,803.

By reference to page 73, it will be seen that, according to the average number of claims and average amount paid, as shown in our tables, the loss to males only from eighteen to seventy years of age, would amount to \$5,685,836.26, or \$378,033.26 more than the loss sustained by fire in the State during the same year, and that the loss from fire is about one-half of the total loss to both sexes, of from twenty to seventy years of age in all gainful occupations. (See page 71.)

The Fire Marshal, in his report, said: "Five per cent. of the total number of Boston fires were of incendiary origin, while 14 per cent. of the fires occurring outside of Boston were incendiary;" and then he says: "It remains to be seen to what extent the percentage of incendiary fires in the State, outside of Boston, would ultimately be affected by the present system of universal investigation."

Again he says: "A very large proportion of the incendiary fires have been set for the purpose of ob-

taining insurance, a small percentage being attributed to motives of spite and revenge, or to the irresponsible acts of an unbalanced mind."

"The insurance company is interested in accepting only the risks of honorable individuals. It should not be forgotten that the character and standing of an applicant for insurance are as important factors in the desirability of a risk as the physical hazard of the property insured."

"Forty per cent. of those insurance-defrauding fires were the work of parties with a record, that is, who had previously collected, or attempted to collect, insurance from one to eight times, on fires which were believed to be incendiary."

Another cause of fire he declares to be the improper, and oftentimes criminal, construction of buildings.

It cannot be said that personal accidents are due to incendiary origin, but it is true that a very large number of fraudulent claims are made upon accident insurance companies. Every company has been forced to contest claims of beneficiaries and legal representatives, where the policy holders died of disease. Sometimes an attempt is made to trace the disease back to an accident, and sometimes, when there is little or no hope of gaining a suit, the claimant hopes that the company will compromise, rather than contest. Scores of such cases are within the knowledge of the writer; also many cases where the policy holder pretended to have an accident, when he was suffering from rheumatism, lumbago, or some other

disease or infirmity. Sometimes old wounds or injuries are reopened, purposely to recover indemnity benefits. A notable case of this kind occurred in New York, where the policy holder made a claim for the loss of a toe, and then annually, or semi-annually, thereafter reopened the wound, making claims against several companies. He was finally arrested and convicted, and punished with three years' imprisonment. Still others pretend to receive injuries while travelling in electric or steam cars. The percentage of claims paid to persons with a record, that is, persons who had previously received, or attempted to receive, benefits from accident insurance companies is unknown. Under the present form of conducting the business, many of the companies soon become acquainted with the names and addresses of such persons.

It would be of importance to know how many accidents are due to improper and oftentimes criminal construction of buildings, and to the lack of proper safeguards for those employed in the construction and in the operation of machinery.

Accident companies suffer a great deal from malingerers, persons who, having received a slight injury, nurse their injuries and continue under the care of a physician for a long period of time. It may, perhaps, be safely said that from fifteen to twenty per cent. of the amounts paid by accident insurance companies are paid to fraudulent persons, or to malingerers, or to others not entitled to benefits.

Claims are made against accident companies for disabilities not due to accidents. Claims are also made by persons who are not insured at the time of the accident. Claims for indemnity for wholly disabling injuries are often made by persons who are only partially disabled.

Over insurance is guarded against by the most conservative companies, but it very frequently occurs that, through misrepresentation, a policy is granted to a man at a rate of indemnity in excess of his weekly earnings or income.

## CHAPTER VI.

CLASSIFICATION OF OCCUPATIONS AND EXPOSURES.

As the accident insurance business is based upon the classification of risks and exposures, the success or failure of an accident insurance company depends largely upon the character of its classification, and the rigid adherence thereto; or, in other words, upon the ability and integrity of the management.

The risks of occupations are measurably well understood. But the reverse is true of the risks of common and particular exposures.

The moral risk is an important factor in accident insurance. Very little can be known of the moral risk of an applicant, and it often occurs that a man supposedly a good moral risk, is found to be a very undesirable one. Men who would ordinarily scorn to steal or lie, will magnify a slight injury, or be dilatory in resuming work when they are able to do so. This subject will be treated further under the chapter on the "Claims and Benefits."

A man in excellent bodily health is a better risk than a man in poor physical condition.

Overweight and underweight add to the risk, either as to increasing liability to accidents, or increasing liability to a slow recovery from an accident.

Any physical or mental infirmity increases the risk.

An overseer in a lumber or paper or pulp mill is a greater risk than an overseer in a cotton factory. Men working in or about a mill, and who are compelled to walk through a yard with many obstructions, are more hazardous risks than men walking through a yard or place where there are no such obstructions or dangers.

Exposures may be divided into two classes—common and particular exposures. Accidents occurring about house and grounds are generally common exposures to all classes of occupations.

Men insured in A, \*A or select and preferred occupations, living in large cities, are not exposed to some of the risks that men in the same class are exposed to in some of the smaller cities or towns.

To illustrate, a banker or lawyer in a large city would hire some other person to do work about the house and grounds that a banker or lawyer in a small city or town would do himself.

Accidents occurring on account of horses may be risks of the occupation, or common or particular risks. A man having care of horses is among the hazardous risks.

Accidents occurring on the streets are usually common risks. But many of these accidents, as the slipping and falling on the ice, are often due to neglect in the removal of the ice from the sidewalks. So that a risk in a city or town where great care is exercised in getting the sidewalks free from

ice, may be less than in a city or town where little or no care is used.

Many of the accidents occurring while engaged in amusements are common risks, although, as a rule, the persons insured in Class A and \*A, or select and preferred risks, meet with more accidents from this cause than the other classes, because they devote more time to recreation. Some kinds of amusements, such as basket ball and gymnastic exercises, may be termed particular exposures.

Mr. Edson S. Lott, Secretary of the United States Casualty Company, of New York, in a recent article, gave a list of ten consecutive death claims paid by one company. Of these ten, but one death happened while the insured was engaged in the occupation under which he was written. All the other deaths occurred in a manner common to all classes of risks.

This would seem to indicate that insurance based solely upon the classification of occupations is not scientific. This is understood by some underwriters, and they class their risks according to occupations and exposures. It is well understood that a scientific classification of exposures is not practicable at this time; yet all conservative accident underwriters, starting with the classification of occupation as the basis, add thereto sufficient cost to cover the risk of common and particular exposures, as nearly as possible.

Unless great care is used in the classification and acceptance of applications, no company can safely

predicate the actual cost of the insurance. Mr. Lott says: "It has been established that there is not sufficient witchcraft in the word merchant to transform the driver of a delivery wagon into a better risk than if the applicant were charged the manual rate for a person driving a delivery wagon."

"To describe a carpenter as a contractor, does not throw around him a halo of sanctity, and throw off the risks to which his occupation makes him liable."

The tendency among agents is to write an application in a class of less cost than the one in which it should be rated. Companies which wink at such violation of the rules of conservative underwriting will have cause to repent their negligence.

The zeal of some companies to get business has overreached the bounds of discretion. Carpenters who ride to and from their work have been classed as commercial travellers, and machinists have been insured as clerks. Such a course will end in disaster.

Mr. Lott, in his address before the national convention of the insurance commissioners, said:

"The field of accident insurance is as wide as the civilized world, but it is only cultivated in patches. Let us, therefore, never forget that there is room for all the companies now in existence, and space for more to come. Antagonism and undue cheapening premium rates are suicidal."

"I am acquainted with a city of considerable size in which the merchants seem to be all in a tacit league to uphold one another's credit, particularly where the interests of an outsider are alone concerned. That is a strikingly prosperous city. As a rule, casualty companies are in no need of factitious support for their credit. Those that cut any considerable figure in the commercial world can rely upon their resources and their reputation for prompt adjustment of losses to sustain their financial standing. Nevertheless, there is no company so well established as to be entirely beyond the reach of injury from continual assaults of competitors. 'Live and let live' should be the prevailing rule of conduct. For every accident insurance company that is properly equipped and well conducted the world is amply able and willing to furnish a handsome subsistence."

The relation of claims to the classification of occupations and exposures should receive the attention and study of accident underwriters. It is evident that, in some companies, business is sometimes written without due regard to that relation, and that agents are given too great latitude in fixing the rating of applicants.

Care must be given to an analysis and study of the real hazard involved in the different classes of risks. For instance, the select or preferred, or A and \*A, are but little exposed to accidents in their occupations, but they are more exposed to that class of accidents that occur on the streets and about the house and grounds and in amusements than the mechanic classes.

The select and preferred class devote consider-

able time to riding, driving, boating, yachting, hunting, fishing and gymnastic sports of every kind.

In the classification of risks it must also be borne in mind that what would wholly disable a man in one occupation, might not cause any loss of time or disability to one of another occupation. Then again a very slight injury to the fingers will wholly disable a musician in a string band, while it would only be a matter of inconvenience to a banker or broker. Barbers and dentists are disabled from slight injuries to their hands that would not disable some in the mechanical classes.

When the nature of the occupation or profession is such as to require perfection of touch, as in the case of musicians and some others, the cost of the insurance is thereby enhanced.

Each company issues an agent's manual, containing instructions to agents, covering nearly every detail, with tables of benefits and occupations, risks or exposures, etc. These manuals state the powers of agents as follows:

"Agents do not have any authority to bind the company by the acceptance of any risk, or to reinstate a lapsed policy holder, or to make any changes in the application or policy. They are not authorized to contract any debt in the name of the company, or pay any claim against it, unless they are authorized in writing. Agents must not print or issue any advertising matter, even at their own expense, without first submitting the same to the home office for approval."

In some companies agents are not allowed to collect money unless specially authorized, first payment excepted. Some companies have specially appointed agents or general agents, who have the right to bind the association. Such authority is specially delegated.

The agent is instructed to guard against overinsurance. As a rule, applications for an indemnity benefit in excess of weekly wages, salary or actual money value of time must not be taken.

Agents are required to explain to every applicant the importance of carefully reading his policy. He is also instructed to inform the applicant what to do in case of accidental injury.

The risks or occupations are generally set forth in alphabetical order, A, B, C, D, E, F, G, though some use numerals, and some use terms such as "select," "preferred," "ordinary," "medium," "special," "hazardous," "extra hazardous," etc. The manuals of some of the companies contain as high as two thousand occupations, or divisions of employment.

The "select occupations," as a rule, is the same classification as A, or "No. 1."

Class A includes the professional men, other than doctors and dentists, they being deemed a more hazardous risk than other professions. It also contains wholesale merchants, corporation officers, bankers, commercial travellers, etc.

Class "\*A," termed "preferred" in some companies, and "A" in others, covers physicians and

surgeons, dentists, photographers, hotel keepers, etc.

Class "B" covers musicians, printers, compositors, restaurant keepers (proprietors), telegraph and telephone operators, etc.

Class "C" covers barbers, livery stable keepers (proprietors not working), and foremen in different manufacturing establishments, contractors (supervising only), etc.

Class "D" covers plumbers, machinists, printers pressmen, bookbinders (hand tools only), carriage makers, cabinet makers working (bench work only), policemen, etc.

Class "E" covers granite cutters, brick and stone masons, stationary engineers and firemen, house painters, creamery workers, etc.

Class "F" covers carpenters, farmers (owners, working), horse shoers, laborers, quarrymen, locomotive engineers and firemen, etc.

Class "G" covers planers, matchers, stock cutters or fitters among box workers, framers, and planing machine men in furniture manufactories, and casting house men, fillers or stockers and cupola men in the iron or steel works, etc.

There are yet other risks classified by the companies in different ways, and some companies do not write them at all, such as leather splitters, wood choppers in woods, teamsters in woods, freight brakemen, lumbermen in woods, linemen (current in circulation), manufacturers, and dealers in fire works,

repair train employees, pilots (outside sea service), etc., etc.

The subdivision of labor in many establishments necessitates a subdivision in the manual of accident companies; for instance, in the manufacture of boots and shoes, some of the mechanics—namely, cutters (hand work only)—are rated in Class "C," while cutters (drop or dye, without handle), are rated in "F," and leather splitters using certain kinds of machines are in "E," while leather splitters upon other machines are not insurable, or are put in a special class.

Employees in brick yards are generally rated in "F." Carpenters are subdivided into "D," "E," "F" and "G." Electric or cable work employees are generally written in "D," "E" and "F." File makers in "D," "E" and "F." Furniture factory employees are, as a rule, hazardous and extra hazardous risks.

Cabinet makers and carvers (hand work) are in "D," and employees putting furniture together in "E," while men running irregular molders or shapers are not insurable in some companies, and are an extremely hazardous risk.

Iron and steel workers have many subdivisions, and very many of them are extremely hazardous, and very few indeed are rated as high as "D." The same is true of men employed in lumber mills. Paper and pulp mill employees come into the hazardous or extra hazardous classes. Tanners and curriers have but few receiving as high as Class "E."

Manufacturers are rated in "A," "\*A," "B" and "C," those who are business managers, not supervising, coming in benefit "A," or "\*A," according to the magnitude of their business. Those supervising only come under "B." Where machines are used, as in manufacturing paper and pulp, etc., and where the proprietor supervises, they are rated in "C,"

The cost of insurance is based upon the risk of the occupation of the insured, plus common risk. A policy for \$1,000 accidental death benefit and \$5 weekly indemnity costs, according to the risk, from \$4 for the best risk to \$50 and sometimes more for the most hazardous. The cost of the insurance varies, the capitalized or stock companies charging more than the assessment or mutual and fraternal societies.

# CHAPTER VII.

### APPLICATION AND POLICY.

The definition of the word "accident," as used by accident insurance companies, can be determined only by the language of the policy.

Accident companies do not insure against accidents. They insure against such loss as the policy thereafter describes, sustained in consequence of such accidents as the policy covers.

Accident insurance companies are sometimes charged with so writing their policies or contracts that the public cannot understand what is covered. A careful examination of the claims paid by any company will reveal the fact that however careful they may have been in their attempts to protect the company, they have failed, and have been subjected to all manner of frauds. A well-known insurance writer has well said:

"Conditions are introduced into policy contracts for the purpose of excluding uninsurable hazards, and to define the hazards so as to give the law of average effect. A policy without conditions would be absolute evidence of the incapacity of the maker of it. However this may be, if insurance is a private enterprise, the seller of the contract has the absolute right to offer any contract, not delusive, which he pleases."

Objection is often made to the condition in accident policies wherein external visible signs of the accident are required in order to constitute a claim. But what a door would be opened to the admission of a great multitude of fraudulent claims were this condition omitted. Purely fictitious claims, disability arising from diseases which accident policies are never intended to cover, slight and frivolous claims, etc., would all be crying at the door of the company for the possession of its funds. Besides, in almost all cases where an injury is received through "violent external and accidental means," some sort of a mark or sign must and will be left on the body. So true is this that the absence of such sign is very strong evidence that the claim is not covered, or is fraudulent.

If there are exceptional cases, where the reverse is true, they are so rare that to break down the rule for the sake of the exception would be fatal to a well-managed business. In fact, every condition and restriction in an accident insurance policy can be satisfactorily explained to any intelligent and fair-minded person. These conditions are not embodied in the policy for the purpose of avoiding honest payments, but to enable the company to determine whether the applicant is entitled to benefit or otherwise, and as a proper safeguard for the protection of its funds.

It must be borne in mind that in accident insurance the applicant is not required to pass a medical examination, and, therefore, the company is compelled to rely upon the integrity and good faith of the insured. Some of the policies cover loss from accidental death only. Others cover loss from non-fatal injuries only, and others cover loss sustained from fatal and non-fatal injuries; and yet others enumerate the specific injuries for which they pay the sums stated in the policy.

The form of expression is nearly the same in all policies, or at least covers the same. We quote a few forms of expression:

"Against loss of time, not exceeding 52 consecutive weeks, resulting from bodily injuries effected during the term of this insurance, through external violent and accidental means that shall, independently of all other causes, immediately and wholly disable him from prosecuting any and every kind of business pertaining to his occupation above stated."

"Against the effects of bodily injuries caused solely by external violent and accidental means."

"Against loss, as hereinafter set forth, effected during the continuance of this policy in force, through personal bodily injuries caused solely from accidents unforeseen, occurring without design or intention on the part of the insured, or any other person (assaults by burglars or robbers excepted), due wholly to violent means external to the body, and such as shall be evidenced (except in case of drowning or bone fracture) by some sign or mark on the exterior of his body, visible to the eye, and such as shall immediately wholly and continuously disable the insured from the date of the accident, and such as are not caused or contributed to by paralysis, apoplexy, dropsy, heart

disease, vertigo or fits, or any disease, previous wounds or injuries, or any infirmity, deformity or defect, mental or physical, whatsoever."

The last form of expression gives the policy holder a clear idea of what his policy covers.

All policies are issued in consideration of warranties made in the application, and of the conditions and agreements of the policy.

The company has a perfect right to assume what, in fact, ought in all cases to be true, that in putting his signature to these warranties and agreements, or in accepting them as a part of his contract, the applicant has full knowledge of them and of all their bearings, and no responsibility can justly attach to any company or its agents for the wilful ignorance of an applicant, if it exists.

As a rule, insurance policies do not cover disappearances, suicide, hernia, nor accidents, nor death, nor loss of limb or sight or disability resulting wholly or partly, directly or indirectly, from intoxication or while intoxicated, or from or while violating the laws; nor do they cover injuries of which there is no visible mark on the body, or from any of the following causes: Diseases, medical or surgical treatment (except amputations necessitated solely by injuries), fits, vertigo, sleep-walking, voluntary or involuntary taking of poison, or contact with poisonous substances, or inhaling gas or vapor, sun stroke or freezing, duelling or fighting, war or riot, intentional injuries inflicted by the insured or any other person (except burglars or robbers), voluntary over-exertion or ex-

posure to unnecessary danger, entering or trying to enter or leave moving conveyances using steam or electricity or cable as a motive power, being in or on any conveyance not provided for transportation of passengers, or upon any railway bridge or road-bed (railway employees excepted).

Some companies cover some of the above by paying a small indemnity for a short period of time.

An insurance policy is a contract between the company and the insured. Agents are instructed to show a copy of the policy to the applicant, so that he shall have full knowledge of its conditions and provisions.

In some accident companies or associations the agreements and conditions are set forth in the applition, that is, those agreements and conditions which are necessary for the protection of the insured, as well as for the protection of the company or association.

Policies have developed from a very crude to a very elaborate contract. The applicant sets forth in his application his name, age, height, weight, residence, place of business, post-office address, occupation, duties of the occupation, name of firm, goods manufactured, handled or sold, beneficiaries' name, residence and relationship. He is also required to state as to whether he is insured in any other accident insurance company, whether he has been previously insured in the company or association to which he applies, and

as to the amount of weekly indemnity that he carries. He also states whether or not any company or association has ever declined to accept his application or refused to continue his insurance. His habits of life must be correct and temperate. He must be in good health, and in possession of the full use of all his limbs and faculties. If he is subject to fits, vertigo, disease of the brain, paralysis, heart disease, varicose veins, rheumatism, or any mental or bodily infirmity, injuries or wounds, he must set them forth.

The policy sets forth the limits of travel, and he agrees to use all due diligence for his personal safety and protection, and to properly care for injuries received. He must notify the home office when he changes his occupation or address, or if he applies for or accepts any additional accident insurance. He is warned that any misstatement, misrepresentation, fraud or concealment of facts or false swearing, either when making his application for a policy or making application for any of the benefits, will avoid his policy.

He is also informed as to what his policy covers and what it does not cover. However, companies differ in this, as in many other respects. He is to give immediate notice of any accidental injury, and is to furnish direct and positive proof of the cause, nature and duration of disability, date and place of accident, and such other information as is necessary for the adjustment of any claim that may be made. He agrees that the association shall have the right to examine his body in respect to any injury or cause of

death, and in many of the policies he agrees that such notice shall be given as shall enable the company or association to hold an autopsy, if they deem it necessary.

All the policies differ in language, although almost all of them are agreed in many respects.

The amount paid for accidental death, loss of limb, permanent total disability, wholly disabling and partially disabling injuries, are set forth clearly.

The maximum sum is paid for loss of life, and the same amount is often paid for severance of both limbs, or one hand and one foot, or the total incurable blindness of both eyes, and a less sum for loss of a hand or a foot, or one eye.

The most modern policies give a benefit or indemnity for wholly disabling injuries; that is, for an entire loss of time in consequence of the accident, for a period of time which has varied from fifty-two to one hundred or two hundred consecutive weeks, and also a partial disability benefit for such loss of time as he is prevented from performing some of the duties of his occupation, but not all of them, and other forms of policy contain benefits giving an extra amount for loss in consequence of railroad accidents.

In the event of the insured changing his occupation permanently or temporarily, that is, assuming a greater risk than that against which he is insured, he is paid as though he were insured in that risk or exposure, and not according to the original rating.

Some companies or associations issue policies

providing what are termed "special benefits," giving a small amount of benefit for losses sustained that are contributed to or caused by what has heretofore been exempted from benefit.

All conservatively-managed companies are very careful not to undertake to cover loss of time, loss of limb or life that are the result of disease, or the result of unnecessary exposure, or even accidents which are not due wholly to violent means, external to the body.

Competition in business has often thrown down the safeguards which should protect the company, not only against fraud, but against demands upon its funds for payment of what is not an accident; for instance, such as are caused or contributed to by paralysis, apoplexy, dropsy, heart disease, vertigo, fits, or any infirmity, deformity or defect, mental or physical.

Many companies refuse to insure against certain hazardous occupations and exposures. They do not insure balloonists, divers, pugilists, professional baseball and football players, those handling, transporting or manufacturing explosive substances or compounds, or engaging in bicycle racing, etc. Many do not insure sailors or miners, or the most hazardous occupations in railroad service, such as freightbrakemen, couplers, switchmen, yardmen, etc. The insured, unless they are railroad employees, are not covered while walking or being on the bridge, roadbed or right of way of a railroad.

Some companies cover choking, sun-stroke and

freezing, while others do not. As a rule, the following risks are prohibited: Persons who have lost one or both limbs, or the sight of one or both eyes, or are deaf, compelled to use a crutch, insane, demented, subject to fits, intemperate, reckless, disreputable, without visible means of support, persons who are suffering from any bodily infirmity, persons who have had wounds, injuries or disease which would render them specially liable to accident, or which would aggravate or retard recovery from an accident; or persons having previous wounds, injuries or disease which an accident would aggravate or reopen. Exceptions are sometimes made as follows: Persons who have lost the sight of one eye, but are in all other respects desirable risks, may be insured in one rating lower than that fixed for their occupation. They are also required to sign a special agreement in reference to the amount to be received in case of an injury affecting the sight of the remaining eye.

There is no attempt on the part of the insurance underwriter, that is, the manager of the company or association, to deceive the policy holder.

On the contrary, every possible effort is made to give him a full and clear understanding of his policy contract; every point is set forth in the plainest language, and it is the practice of some companies to send with every policy a letter to the insured, earnestly requesting him to carefully read and study his policy, and inviting correspondence.

Under the laws of Massachusetts, the size of the

type is fixed by law, so that the smaller type shall be of sufficient size to be easily read. The decisions of the courts are watched closely, and if it is found that the form of expression in the policy is not such as to protect the company, the language is changed.

The student or legislator can easily secure copies of all policies in the accident insurance registers published by the different publishing houses.

Different forms of policies are written by the different companies and associations, and in addition to these, some companies issue insurance tickets, good from one day to a month.

It is a rule with the stock companies to write their policies for one year or a term of years; usually one year. The policy holders in a mutual or fraternal association can continue their insurance from year to year, subject to the limitations and conditions of the policy, or they may withdraw from the association, or drop their insurance at any time. The association has the right to cancel the policy at any time by returning the amount of the unearned premium.

Within a few years a new feature has been introduced into most accident policies. It is that of indemnity for partial disability. Where one person is wholly disabled, many are partially disabled. This partial disablement interferes with business, occassions loss, and should clearly be covered by insurance. It is now accordingly so covered, but as it is a risk particularly open to misrepresentation, the amount of indemnity is wisely left by the terms of the policy to the company, guided by the sworn statement of the insured and the physician's certificate.

### CHAPTER VIII.

#### CLAIMS AND BENEFITS.

There is an opinion among many people that insurance companies resist claims without reference to their merits or demerits. No insurance manager would dispute a claim without excellent cause. In fact, in the accident business, many claims are paid that ought not to be paid, in order that litigation may be avoided. Some persons, aware of this fact, seek to extort money from accident companies, when they have no valid claim.

The great cost imposed upon accident companies in protecting their funds against fraudulent and fictitious claims, and against suits to recover death benefits in case of death by disease, is shown in the following statement of facts, taken from the records of an accident insurance company.

Of thirty-one deaths, for which claims were made, six occurred while engaged in their occupations; six were drowned, one of them probably suicide; one was run over by the cars in a railroad depot, probably suicide; two died of pneumonia; five died of alcoholism; five of other diseases; one cause of death unknown; one killed while engaged in an occupation not covered by the policy; one run into by a wagon while bicycling; one by an explosion; one killed at a railway crossing; one died of heart disease.

Fourteen of these were straight accidents and promptly paid; three of them withdrew the claim, as the fact of their dying by disease was acknowledged; five of them were contested; and nine claims were settled, by the payment of small sums, to avoid litigation, although the company ought not to have been put to a dollar's expense, as the fact of alcoholism or disease was well established.

In an interesting non-fatal injury case, suit was brought against four companies, to recover twenty-six weeks' indemnity for accidental injuries, and a suit also brought by the same party against a railway company, for the same accident. The case was tried and the claimant lost, after an expense to the companies of hundreds of dollars.

Persons who are injured while performing any act or thing pertaining to an occupation of greater hazard than that in which they are insured generally demand the maximum indemnity named in the policy, although the policy sets forth that they are entitled only to the indemnity their premium will buy in the occupation of the greater hazard, in which they were injured.

To illustrate: A manufacturer, proprietor, office duties only, receives an injury while operating a circular saw. Under the conditions of his policy he is entitled to but \$5 indemnity per week, but he demands \$25, the sum named on his policy for the occupation given in his application, and sues to recover, thus putting the company and himself to useless expense. Electric workers handling live wires are not insured

in some companies, in other companies they are insured for \$100 death benefit and \$2.50 per week indemnity, and yet men not insured to handle live wires do handle them, and are killed by the contact. In such cases the company is often sued to recover the death benefit named as the benefit of the occupation in which they were insured.

Cases of self-inflicted injuries have been numerous, and, as it was difficult for the companies to prove that the injuries were self-inflicted, thousands of dollars were paid to avoid litigation. The increase of this class of injuries, after the introduction of additional benefits for the loss of one or both limbs, forced the companies to introduce a more thorough system of investigation. These investigations often resulted in such evidence of attempted fraud as to warrant the companies in resorting to litigation. The success of the companies in establishing fraud in some notorious cases, have lessened this class of claims.

Attempts are very often made to deceive the company as to the date of injury. Persons who have been insured, and whose insurance has run out, renew their insurance, and then attempt to recover for accidents received during the time they were uninsured. Persons who are not insured sometimes make claims. In a case within our knowledge, a claim was made for \$7,500 by a person who never was insured in the company, the company declining to accept his application. Suit was brought on the ground that the liability commenced with the forwarding of the appli-

cation. The judge took the case from the jury, and decided for the defendant.

Very frequently claims are made for rheumatism, lumbago and other diseases. Claimants often deceive their attending surgeons, claiming to have received an accident of which they can furnish no proof, either by marks upon the body or by witnesses. Deception is also attempted in giving the duration of the disability, by claiming indemnity for weeks after they were able to resume the duties of their occupations and surgical attention had ceased.

In fatal injuries companies are obliged to protect themselves against claims for death due to disease, such as apoplexy, epilepsy, coma, heart disease, kidney disease, alcoholism, etc.

Accident companies insure men from eighteen to sixty-five years of age for \$5,000 in select and preferred risks, at a cost of from \$20 to \$25 a year. The price charged for accident insurance, compared with the cost of life insurance, will show that accident companies cannot afford to pay for disease. At twenty-five years of age, an insurable person would be obliged to pay, for a straight \$5,000 life insurance policy, \$99.25 a year; at thirty-five years of age he would pay \$134 a year; at forty-five he would pay \$194.75; at fifty he would pay \$241.50, and at sixty he would pay \$385.50.

Many persons who cannot obtain life insurance, because of physical disease or disability, and who desire some form of insurance, will secure accident insurance, as no medical examination is required. Unfortunately for the accident companies, if any slight accident occurs to such a person, even though the accident itself be due to the diseased condition of the insured, and death ensues, the chances are that a claim will be made by his beneficiaries on the ground that he died of accidental injuries.

Sometimes claims are made for accidental death, when the death was due to the aggravation of old injuries. Sometimes, during a period of disability from a slight accident, the insured has some disease extraneous to the accident, such as pleurisy, measles, etc., and a claim is made on the ground that he died on account of the accident. Alcoholism is always difficult to prove, but very many of the cases that lead to litigation are due wholly to this cause.

Delay in recovery is often caused by concomitant disease, also by neglect of insured to secure prompt surgical attention.

Malingerers, conscious and unconscious, cause a great deal of trouble and expense to accident companies. The conscious malingerers are often detected, but unconscious malingering is difficult to prove. Many men who receive comparatively slight injuries magnify them in their own minds, and are fearful lest fatal results may ensue. In one case that came to our knowledge, a business man receiving a slight injury came to believe that if he undertook any activities, or indeed left his house, he would die of heart disease, and so for months, against the advice of his relatives and his surgeon, he remained away from his occupation.

There are cases in which it is found that the insured has secured a large amount of insurance in excess of his weekly income, salary or wages. In such cases recovery is generally retarded, because it pays better to be on the list of claimants of an accident company than to resume work.

As has been referred to before, accident companies do not undertake to insure against all classes of accidents. The medical fraternity acknowledge that there are accidental infectious diseases, such as erysiples, small pox, diphtheria, measles, scarlet fever, mumps, chicken pox, typhoid fever, pneumonia, etc. Although these diseases are accidental in the sense that they are infectious, they are not covered by an accident policy. Claims have been made against an accident company for colds, sore throat and malaria, claiming these diseases were due to an accident.

The agents of the companies sometimes assist the claimants, under the plea that a liberal settlement works for the good of the company. The insurance underwriters, who have had experience, hold to an ntirely different opinion; and an able insurance writer says:

"A strict construction of the terms of the contract, regardless of the character or influence of claimants, treating rich and poor alike, will establish confidence in the integrity and good faith of the settlement; while the man with possessions and influence will justly despise any company which will seek to buy his influence by the payment of an excessive and unjust claim, when, at the same time,

he sees a claim equally valid to his own denied to his poorer neighbor."

"In the practical working of this business there are difficulties to be encountered which do not present themselves in most other branches of insurance. In life insurance, the claimant must be proved to be dead before a claim is paid; and in reference to fatal accidents, of course the same rule prevails. In fire insurance, there must have been a fire, and there must therefore be some visible evidence of loss. In reference to non-fatal injuries, frequently no such means of proof are at hand. In the case of broken limbs there is direct evidence. In the case of scalds and burns, it is well known that they have been personally inflicted for the sake of creating claims. the case of sprains and invisible injuries, whether the claimant can't work or won't work, remains occasionally a mystery. The practical experience of a well-trained staff, and above all a sagacious, able, experienced medical adviser, are of the first essentials in the conduct of so special a business."

The forms used by the company in securing full and complete proof differ with the various companies, although a greater uniformity exists today than ever before. These forms are printed in good-sized type, and necessarily, the questions are made to cover practically all kinds of accidents. As a rule, when the notice of an accident is received, one of the clerks of the claim department immediately stamps the hour and day of receipt upon the notice, and ascertains whether the person is insured in the company or not;

whether he has had any previous accidents, and, in fact, obtains a history of the claimant, as far as the application for a policy or his past accident history gives such information. If the person is insured, then a form (No. 1) is sent to the claimant and another (No. 2) enclosed to his attending surgeon. Form No. 1 contains a short letter to the claimant, and printed rules are given for the guidance of claimants and their attending surgeons. The claimant is required to give his name, age, residence, etc. Questions are asked as to any serious disease that the claimant may have had, and as to previous accidents, with their nature and the results. Then he is required to give the date of the accident, day and hour, and to answer when he ceased to work, what he was doing at the time of the accident, how it occurred, the place where it occurred, his business or occupation at the time of the accident, and the duties usually performed. He is then required to describe the injuries, state how long he was confined to the house or bed, and, if not confined to the house, how he had employed his time. He is required to give the name and address of his physician or surgeon, and the date when he was first attended, the names of witnesses, the names of any other companies in which he may be insured, whether he was suffering from any diseases prior to, or at the time of, the accident. If an employee, he is required to state his wages or salary. He is then asked whether he has been able to perform any of the duties of his occupation.

The attending surgeon's blank No. 2 contains a letter requesting him to give the personal history of the patient as to his occupation, serious diseases, physical deformities, etc.; the history of his present accident, as to whether there were any external marks of the injury, and to describe them and all objective signs technically. A diagram is given on the opposite page upon which the surgeon is requested to mark the place of injury, point of fracture or extent of ecchymosis or conditions of the claimant. He is asked to state his treatment, and give the prominent subjective symptoms; to give his diagnosis in full; the condition of the patient at the time of the report, the progress he is making, complications present, if any; the extent to which he is disabled, and an estimate of the time he is likely to be partially disabled. He is also requested to give his opinion as to whether the disability is due to an external violent accident.

A witness blank (No. 3) is also furnished to witnesses of the accident, in which they are asked as to the date and hour when the accident occurred, the condition of claimant at the time of the accident, where the accident happened, what the claimant was doing; to state his occupation, and duties of his occupation, and to describe the circumstances attending the accident, the nature of the injuries received, and whether he was under the influence of intoxicating liquors or not.

Upon receipt of the first and second forms, an examination is made as to whether the notice of the accident was received within the required time,

whether the claimant was injured while performing, temporarily or permanently, the duties of any occupation of greater hazard than the one in which he was insured, to ascertain whether he was immediately disabled, whether or not he received prompt surgical attention, and otherwise complied with the conditions of the policy.

The papers are then submitted to the examining surgeon of the company. After carefully examining the papers, he writes either to the attending surgeon, for further particulars, if they are necessary, or to the company's surgeon, to make an examination for the company.

The claimant is furnished with a postal card which he is requested to return when he has resumed any or all of the duties of his occupation.

At the proper time the fourth form is sent, entitled "application for indemnity."

These forms differ so widely that it is almost impracticable to describe them, other than to indicate that, in most cases, the claimant is to make a sworn statement as to his occupation and its duties, as to the date of the accident, the date when the disability occurred, the date when he resumed any of the duties of his occupation, and the date when he resumed all of the duties. Then he is required to give the length of time, and to make his claim for the weeks and days that he was wholly disabled, or partially disabled, or both. He declares that he is the person insured under the policy, has received the bodily injuries described, that it occurred without design or

intention, and was due wholly to violent means, external to the body; that the answers in his previous papers and statements were true, that he has not abstained from his occupation longer than was absolutely necessary, and was not under the influence of intoxicating liquors or narcotics at the time of the accident.

The attending surgeon's certificate reaffirms some of the statements made in his previous report of the surgical history of the case. He states the length of time which, in his opinion, the claimant was wholly disabled, the time he was partially disabled, etc.

The claimant's employer is requested to sign a certificate in which he gives the date of the accident, the duties performed by the employee, description of how the accident occurred, time when he ceased to work on account of the accident, when he resumed part of his duties, and when he resumed them all, together with the wages of the employee and the length of time the claimant had been in his employ.

The number of the policy and the number of the claim are given in every form and in every case, the claimant is notified that in furnishing blanks, the company acknowledges no claim and waives no right of defense.

In the case of an accidental death, some of the companies have printed forms to which addenda are made, and other companies prepare special type-written forms in each case. It would be impossible to make out individual papers for every individual case of non-fatal injuries.

Many claimants seem to feel that the accident in-

surance companies are too particular in their requirements as to date of notice, and are too elaborate in their questioning in the forms for proof of claim.

We can do no better than to quote from Walford's Insurance Cyclopædia, that the reader may understand, from an unprejudiced source, the necessity for the protection taken as to notice of accident, proofs of claim, etc.;

"Notice of accident.—It may be regarded as of the essence of the contract of insurance that timely notice—that is to say, that the earliest possible notice—be given to the insurer of any casualty having happened by which it is supposed a claim has arisen. Many policies name a specific time within which notice must be sent, or failing such notice any benefit otherwise accruing is forfeited. Others simply say, "forthwith," or "immediately;" but the intention is in all cases the same, viz: that the insurer shall have early notice, in order that he may enter into or upon such inquiry as he deems important to his interests."

"Twenty years' experience of this business has shown the writer that whenever there is any irregularity about the notice of injury or death reaching the office, there is also some irregularity about the claim itself."

"Even in non-fatal injuries, the necessity of prompt medical advice or special treatment, themselves suggest the injurious consequences which may arise from delay."

"It must be remembered, as a rule of vast im-

portance, that notice to an agent is not notice to the principal. It is especially so in the case of accident insurance associations."

- "I find it is a point of the first importance that the company provide its own forms for the insertion of details of non-fatal as well as fatal injuries, and that the company insist upon these being accurately filled up and returned before any claim can be admitted. It is no hardship on the person subsisting on the funds of the company to make full and proper returns whenever required. Any attempt at evasion must be regarded with great suspicion."
- "Proof of claim.—The proof to be furnished in support of a claim must of necessity depend greatly upon the nature of the insurance. Its form is generally more or less fully indicated in the policy, or its conditions."
- "In accident insurance, the question of 'cause of death' is of the most vital importance. The accident must be the direct and sole cause of death, and all diseases and personal infirmities (not previously stated, and especially insured against) must be excluded. Next, was the insured following the 'occupation' or occupations against the risks of which he was insured, and no other?"
- "Cases not unfrequently arise in the practice of life and of accident insurance, in which the ascertainment of the real cause of death becomes of very great importance. In life insurance almost the only question which can arise is whether the death arose from suicide. In accident insurance the range is

much wider. A man is riding along the road, and falls off his horse. He is picked up dead; but the external marks of injury are very slight. coroner's jury sit, and of course, decide that the man was killed by a fall. The insurance office is dissatisfied, and insists upon a post-mortem examination. The doctors find the cause of death was apoplexy, a fit, or sunstroke. All of these are causes of death outside the conditions of the policy, i. e., they form no part of the risk insured against. Again, a man slightly injures his foot, or his hand; the injury is so slight that he takes no special notice of it. In a few days erysipelas sets in, or pyaemia shows itself, and he dies. But erysipelas and pyaemia are very properly excluded from the causes of death covered by an accident insurance policy—they arise from a debilitated condition of system, or impure blood, and are not 'consequent upon' the injury sustained; inasmuch as out of one hundred persons injured in a similar manner, only one will die from either of these causes—showing therefore, according to all reasoning, that the cause of death lay in the man injured, and not in the nature of the injury sustained. Various other instances occur, as 'rupture,' after a slight fall or shake, etc., etc."

"Admission of claim.—This is a formal act of the company on which the claim is made, and which signifies that all the required proofs have been furnished."

"Payment of claims.—The payment of the benefit or claim for a death loss is often made as soon as satisfactory proofs are received, although most companies have a proviso that they may pay within three months from the date of the receipt of satisfactory proof. In the case of non-fatal accidents, a claim is paid from one week after demand of claim to thirty days thereafter."

"Cases have arisen in which, in consequence of information subsequently received, even after formal admission of claim, payment has been withheld; and justly so."

"Resistance of claims.—There was at one time existing a foolish sentiment regarding what is called the 'disputing of claims' by the managers and directors of insurance offices. It is happily passing away. Insurance is a matter of contract, that contract being based upon good faith. If the underwriters or company find that good faith has not been observed, it becomes a duty to resist. In accident insurance, attempts at fraud are far too prevalent. The ordinary course of resistance is simply refusing to pay, leaving the insured to his legal remedy."

"Where the claim is purely fictitious, or fraudulent in its inception, the initiative should be taken by the insurer, who is too often placed at a disadvantage by allowing the insured to commence a civil process, where a criminal one would most apply."

"In addition to the preceding, which embodies the main points of practice, from the office point of view, there are some other considerations to be regarded in dealing with claims. A knowledge of the legal decisions in previous cases of a like character is of the first importance; while business aptitude, discernment, and diplomacy are very frequently called into play, alike on the part of the 'claim adjuster' and the managers of the office."

## CHAPTER IX.

# LAWS IN REFERENCE TO THE PREVENTION OF ACCIDENTS.

In the preface, attention is called to the need of such legislation as shall tend to prevent accidents, not only in manufacturing establishments, but on the streets and in buildings. Something has been done in this direction in nearly all the civilized countries during the past quarter of a century, but much remains to be accomplished.

The men engaged in the accident insurance business are justly proud of their calling, and have done much to mitigate some of the evils of our present industrial system. The time has come when a long-neglected duty to the public must be performed by them. They are in possession of facts and figures relating to hazardous and other occupations. They know of the loss of time caused by neglect of city authorities to enforce city ordinances, as to the proper care of streets and regulation of traffic. The streets of our great cities are not safe, and indeed are not as safe as they could be made with very little expense.

The profession of medicine can be justly credited with the great service it has rendered in securing laws of sanitation and health, prevention of disease, and control of epidemics. When the accident underwriters shall be called to use their opportunities of

usefulness in the direction of the prevention of accidents, they will doubtless respond as readily as has the medical profession.

The author remembers the day when but little, if any protection was given to even women and children employed in the manufacturing establishments of the eastern states; when women and children threw themselves from the windows of burning buildings, because no fire escapes had been provided, and has witnessed and assisted in securing legislation to prevent such unnecessary loss of life, limb and time.

The legislative bodies of the several states cannot be justly criticised for neglect of interest, if those acquainted with the facts withhold them. The inspiring motive in publishing this book is, that through the meagre data herein contained, further investigation may be made, and a more complete analysis of accidents be given to the public, and that through such data, legislation may be enacted, and the occurrence of many accidents prevented.

The man who works on wood, from the lumber man in the camp to the saw mill employees, through every manipulation of wood until assumes the form of a completed building, or an article of use or ornament, is accompanied by hazards to life and limb and loss of time that can be prevented. Even when the wood is ground into fibre, or dissolved by chemical process in the pulp mill, the same hazard continues. The manipulators of iron, from mining to moulding, and to the construction of buildings, follow close upon those who are employed upon wood.

Every few months people read of the catastrophies to the miners in the mines of the world, but they know but little of the hazards of the men in the stone quarries, of the maimed and wounded in the granite industry. Comparatively recent improvements in the manufacture of tin household utensils have been accompanied by an increase of accidents. Some of the establishments where these household utensils are manufactured have been termed slaughterhouses. Youths and children employed in them meet with frequent accidents, and are often maimed for life.

Employment in the textile business has been rendered less hazardous, because of the legislation enacted in the states conducting the larger part of this business, and the opening of this business in the southern states has been followed by legislation in the same direction. As an illustration of what has been done, we have copied some portions of the laws enacted in Belgium and in one of our southern states.

The introduction of machinery in factories and workshops brought with it extraordinary danger as to life and limb. The number of serious accidents caused by unprotected belting, cogg wheels of machinery, etc., led the Parliament of Great Britain to enact laws for the protection of the working people. This legislation was practical and effective, and soon the machine manufacturers provided methods for protecting dangerous parts of machinery.

Year after year, this legislation was perfected, and was copied by other governments.

Belgium probably has the most elaborate and rigid regulations concerning the safety of workmen in industrial establishments. The royal decree of September 21, 1894, gives directions as to the provisions governing hygienic conditions, and establishing methods of protection against accidents. We quote a few:

"When motors are installed in places in which work is not carried on, access to such places must be prohibited to all persons whose presence there is not required for the needs of the service. In all cases the pits for fly wheels and pulleys, as well as the parts of motors which are in motion, must be enclosed by guards or protective devices of such a character as to protect the employees, as far as possible, from accidents. Gas and petroleum motors must be started by means which do not require the workingmen to take hold of the arms of the fly wheel.

Precautions, as required by circumstances, must be taken in respect to the means of transmitting power and pieces of machinery moving backward and forward (pieces saillantes), or otherwise, when they can occasion accidents.

- "Machine tools, having a rapid motion, must be provided with appliances by which they can be stopped in the shortest possible time, without stopping the motor.
- "Machine tools for cutting, which go at a rapid speed, such as machines for splitting, cutting, plan-

ing, sawing, beading, or other similar operations, must be so installed that the employees can not, from the places where they work, involuntarily touch the cutting edges.

- "No person must be habitually employed where he has access to a fly wheel or any other engine moving with great rapidity.
- "The workingmen must be protected against injury from particles thrown off from material upon which work is being performed.
- "Passages by which employees move about in work places must be of a height and width sufficient to protect the workingmen from being injured by the machinery in motion.
- "Lifts, hoists, elevators, cranes and similar apparatus must have indicated upon them their power, expressed in kilograms, and, if they are made use of by persons, the number of persons that they can transport without danger at the same time.
- "The lifts, hoists and elevators must be so installed and guided that nothing can fall in them. The openings in the floors through which they pass must be inclosed by a fence, one side of which must wholly or in part consist of a moving gate, opening outwardly and shutting automatically.
- "Wells, cisterns, basins or reservoirs of corrosive or burning liquids must be provided with lids or gates or fencing.
- "Measures must be taken to protect the workingmen in case of fire.
  - "The lighting of the work places must be suffi-

cient to enable the workingmen to distinguish the machines or moving parts with which they can come in contact. When petroleum is used for lighting the work place, measures must be taken to prevent the fall or explosion of the lamps. The use of petroleum is prohibited in portable lamps, called 'crassets,' and in all other dangerous apparatus. The apparatus for lighting by gas must be carefully maintained and inspected. When the lighting or transmission of power is accomplished by means of electricity, precautionary measures must be taken to protect the workingmen from the dangers presented by high-tension currents.

"Every accident causing the death of a workingman, or occasioning an injury capable of causing an incapacity for work for eight days, must be reported to the proper inspector by the employer, or his agent, within forty-eight hours. The declaration of the employer must contain the names and addresses of witnesses of the accident. In all cases where death has resulted, the proper inspector must make an investigation of the causes of the accident. A ministerial decree will determine the other cases, when the same investigation must be made."

Special decrees have also been issued regulating industries which present unusual dangers to the lives and health of employees.

Local supervision was provided, and the Belgian Parliament, on May 5, 1888, enacted a law regarding the inspection of such establishments.

Other decrees have since been passed, strengthen-

ing the system of inspection. On July 2, 1899, Parliament passed an act that conferred full power upon the government to take measures for the protection of employees, not only in dangerous and unhealthy establishments, but in all kinds of industries, including commercial enterprises.

In Switzerland the Federal Council enacted a law requiring proprietors of factories to immediately notify the local authorities of all cases of accidents resulting in death or serious injury. Their regulations require that "all movable parts of machines must be inclosed and isolated in such a way as to prevent any dangerous contact with them. Similar precaution must be taken in the case of electric motors and conductors."

"The means of transmitting power that can be reached by workingmen and which are not completely isolated must be placed at least two meters (6.56 feet) above the floor. The cables or gearing which traverse the roads, passages, courts, etc., must be properly guarded. They must not present any prominent collar (clavette) or screw head (tête de vis). Subterranean means of transmitting power must be so arranged that they can be easily inspected from overhead, or by a canal or passage offering no difficulties or dangers."

"In all workrooms means must be provided whereby machines can be rapidly thrown out of gear. When, by way of exception, these are lacking, means of signalling to the motor-machine room must be provided. Separate means of throwing each machine out of gear must be provided."

"Machines must be so installed that workingmen are not inconvenienced by them or exposed to danger. In any case the passageways between machines must be at least 80 centimeters (2.62 feet), and the principal passage one meter (3.28) feet broad."

The cantons of Switzerland have legislation governing such matters within their precincts.

As the employers were often exempt from liability because of the doctrine of common employment, an agitation was begun and continued until an Employers' Liability Act was enacted, Germany taking the lead in 1871, England partially in 1880, and finally replacing it entirely with new methods of enforcing the employers' responsibility in 1897.

The doctrine of common employment has well been termed a judge-made law, it being based upon the assumption that the workman voluntarily assumes the risk of the occupations, including accidental injuries, caused by the negligence of other workmen.

New difficulties soon arose, and these employers' liability laws failed to protect the workmen. Commissioner McMackin, of New York, describes these difficulties in the following language:

"In order to obtain a verdict for damages, the workman is obliged to break down a host of defences set up by a clever attorney. He must prove, first of all, that he himself exercised the utmost care, else he will be adjudged guilty of 'contributory negligence,' and his case dismissed. He must prove that he was

carrying out orders of his superiors; that he was engaged at work within his own employment; that machinery was defective. Finally, after he has given legal proof of these and other technical facts, he must show that he gave notice to his employer of any defect in the machinery that may have contributed to the injury. If he was aware of any defect, and failed to make complaint, he thereby 'acquiesced' in the situation, and had no legal remedy. The element of uncertainty is, therefore, of great importance even with the best of employers' liability laws, and deters scores of workmen from attempting to secure a just compensation. Other deterrents are the heavy expenses of litigation and the absolute certainty of losing employment. The British Royal Commission on Labor clearly pointed out that 'when a workman goes to law with his employer, he, as it were, declares war against the person on whom his future probably depends. The broad result is that a legal claim for damages only answers when the injury is very great, and a workman is prepared to leave his master's service."

The failure of the employers' liability laws to grant the necessary protection, led to a discussion of the advisability of providing legislation by which the right to a stipulated compensation could be obtained without recourse to the law.

Those who are familiar with the accident insurance business can well understand that employers were often made the victims of designing persons, and were obliged to contest claims upon them. In

Germany, a system of compulsory insurance was adopted. This was followed by Austria and Norway, England enacting a workmen's compensation act in 1897. Soon Denmark, Italy and Switzerland fell into line, so that now, in nearly every country in Europe, investigations are being made preliminary to action.

In 1880, as a result of the employers' liability act, companies were incorporated in England to insure the employers against liability for injuries to employees. Branch offices were established in America, and American companies formed. Commissioner McMackin, after a lengthy review of this matter, after speaking of the cost of compensation, says:

"Certain grave objections may be urged against liability insurance, as it is at present carried out. The employer is less disposed to introduce and maintain safeguards about machinery, upon the recommendation of state inspectors, saying that he pays the insurance company for assuming his liabilities."

This is indeed a serious charge, and is well worth public attention. There is evidently a growing distaste for this form of compensation, not only among workingmen, but among fair minded employers.

The Bulletin of the Department of Labor, No. 27, March, 1900, speaking of foreign labor laws, says:

"Each factory law enacted has required the taking of more stringent precautions for the prevention of accidents, and the protection of the health of employees than its predecessors. Prior to 1891, these requirements were for the most part expressed in general terms, that all needful precautions should be taken. The law of 1891 reproduces these provisions, but also mentions more specifically the measures that must be observed."

"Employers must so install and maintain their machinery and appliances that the lives and health of employees are protected, as far as possible. They must, in particular, see that there are provided sufficient light and air; that injurious dust and gases are removed; that dangerous machinery is properly guarded; that precautions are taken against fire, and that regulations to this effect are prepared and enforced."

The Bureau of Statistics of Labor, New York, in the report for 1889, speaking of the action of the State for prevention of accidents, says:

"Nowhere has the modern state assumed that its help is not needed by the working people in dealing with the problem of accidents. It has, as a matter of fact, pronounced gross negligence on the part of the employer to be criminal under certain conditions. It has proceeded further, through its legislature or its courts, and in two directions: First. to require employers to erect and maintain safeguards about machinery at the direction of the factory inspector; secondly, to place upon the employer a financial responsibility to his employees, to be enforced through an action for damages by the injured

person. The former policy has undoubtedly prevented many accidents, and its results appear in the most favorable light in the reduction of the number of accidental injuries sustained by railway employees since the passage of the Federal law requiring the adoption of automatic couplers. The annual reports of the factory inspectors of this State furnish ample testimony of the need, as well as the benefits, of such legislation, as does also the report of the inspector of boilers in the Department of Public Works."

"Nevertheless, the number of accidents reported to the factory inspector during the past year was larger than ever before."

In 1899 the State of Tennessee enacted a law relating to the inspector of factories and workshops. We quote Sections 3-4-6:

"Section 3. All workshops and factories where machinery is used shall be well ventilated and kept as clean as the nature of the business will permit. The belting, shafting, gearing, machinery, and drums of all workshops and factories where machinery is used, when so placed as in the opinion of the shop and factory inspector to be dangerous to persons employed therein, while engaged in their ordinary business, shall, as far as practicable, be securely guarded.

"Section 4. The shop and factory inspector may order the opening of all hatchways, elevator wells, and wheel holes upon every floor of any workshop or factory where machinery is used, to be protected by good trap-doors, self-closing hatches, or safety catches or other safeguards, such as will insure the safety of the employees in such workshop or factory, when engaged in their ordinary duties."

"Section 6. It shall be the duty of the shop and factory inspector to enforce the provisions of this act by giving proper notices to the person, firm, or corporation operating or running workshops or factories inspected by him, and also to make complaint to the attorney-general of the respective districts of all violations of this act."



#### CHAPTER X.

DIFFERENT FORMS OF ACCIDENT INSURANCE.

There are three principal methods of conducting the accident insurance business: The stock form, the mutual or assessment, and the fraternal.

Practically there is no such thing as an assessment in the accident insurance business. It is the rule of all mutual accident insurance associations or companies, to fix the premium of a year's insurance and divide it into quarterly or bi-monthly payments. The principal difference between stock accident companies and assessment mutual accident associations is that the stock companies have a capital stock upon which dividends are declared, and the cost of insurance thereby enhanced. It is a perfectly proper and legitimate investment of money, and if any class of men are entitled to handsome dividends upon their investments, those who invest in the accident insurance business certainly are. The premium rates for insurance are fixed at such a figure as to cover the liabilities from claims, expenses of conducting the business and a dividend upon the stock.

The writer knows of no instance where the excessive death rate has caused an impairment of stock capital. The men who conduct these large enterprises are as a rule men of great ability, and they recognize the truth of our contention that the

premium charge must be such as to cover all of the liabilities of the business, a fair profit and the establishment of a requisite reserve.

Accident insurance differs from life insurance in that "the life policy must eventually become a claim if it is continued in force. The accident policy may never become one."

It is practically certain that of those holding an accident policy for a year, one in seven will become a claim for weekly indemnity. No sufficient data is at hand to give the average number of accidental deaths per one thousand insured persons, but it is generally admitted that about one person in two thousand insured will meet with accidental death.

"A life insurance contract is a continuous one, and the man who carries a contract of this kind for some years and then fails to continue his part of the contract, has something to lose thereby. It is entirely different with fire or casualty insurance. The contract or policy of an accident company is a term contract, that is, for an indefinite length of time, at the end of which, if the contingency against which he is insured has not arisen, the contract expires without any loss to him, since he has had value received in the protection during the term against the contingency insured against, if it should have happened."

An accident insurance contract may be dropped by either party at the expiration of the term agreed upon without prejudice or injury to either party. "A man may be insured against fire, or against accident or burglary, or loss of his plate glass, or storm or lightning for a day, week, month or year, or period of years, and if, at the end of any term, the contingency has not arisen, he can drop his insurance just as the company during that term may cancel his insurance and return to him any unearned premium.

In a life insurance company, the company assumes the maximum amount of the risk, and every day or year added to the age of the insured increases the risk, that is, if a man insures at thirty, it costs more to carry the risk at forty years of age.

In accident insurance, there is no increase of cost in carrying the risk with advancing age. As a rule, the companies or associations limit the age, the law of Massachusetts limiting it to seventy years of age, and many insurance companies decline to accept any risk over sixty-five.

In a life insurance company, a thorough medical examination of the applicant is required. If the insured allows his insurance to cease, another medical examination will be required before he can be admitted to any other company. If he should fail to pass the examination, he would be deprived of the opportunity of securing any further life insurance.

In an accident insurance company or association, no medical examination is required and if a man drops his insurance at any time, at forty, fifty, sixty or sixty-three years of age, he will be accepted by any other company to whom he forwards his application, that is, provided he answers the questions in the application satisfactorily.

Life insurance companies charge a premium ac-

cording to age. A young man at twenty-one can receive insurance for very much less than a man at forty, while in an accident company a man at forty is really a better risk than a man at twenty-one.

In life insurance companies, the mortality tables form the basis, not only of the premium to be paid, but of the reserve which must be accumulated.

In accident insurance companies and associations, the occupation tables form the basis of the amount of premium to be paid, and no large reserve is required if the price charged for the insurance is sufficient, and all that the reserve is needed for is to pay any extra liability to accidental death.

The term "casualty," is often used, as referring to accident insurance, but more and more, the accident business is less a chance, that is, as far as indemnities are concerned. It is reduced practically to a certainty that in a given occupation with a given number of persons, a certain percentage will receive accidental bodily injuries. The number of deaths from accidents in a town, city, or State can be ascertained. The only chance is that any one company or association may receive in any one year more than its due proportion of accidental deaths; but if the death benefit is kept down, that is, if the manager does not permit the fever of competition to affect his judgment, he will decline to write large sums upon any one risk, that is, he will keep the maximum liability of his policies down to the level of his premium income.

Some of the solicitors of the stock companies, as

a matter of business, misrepresent the facts as to assessment accident insurance. They use the arguments adduced against the assessment life business and seek to apply it to the assessment accident business. The only argument that has any force is the argument that, in the event of an excessive death loss in any one year, the assessment company will be unable to meet it because of a lack of sufficient reserve. Assessment accident companies formed under the laws of Massachusetts are compelled to establish a reserve to meet just such contingencies.

The liability of mutual or fraternal accident associations for excessive death loss is far removed, and when it occurs it can be met if a sufficient reserve has been accumulated. In some cases of failure known to the writer, the associations could have paid all their claims in full but for the misrepresentations of their true condition.

If a merchant, even of the best standing, was compelled under the supervision of a State department to report as liabilities, claims upon him which were unmistakably fraudulent, or suits to recover by persons to whom the merchant was not indebted in any way, or should compel a public report of his liabilities that were exaggerated, the merchant would soon be overburdened and driven to bankruptcy.

In the accident business, claims are sometimes made by persons who are not and never were insured in the association, and yet if suit is brought against them such companies are compelled to report the suit, and the amount sued for is placed against them as a liability. The accident insurance underwriters hold that when a claim is made against them where there is evident fraud or where the person is not insured with them, or where the claim is excessive or where it does not come under the conditions of the policy, that then they should not be charged either with a desire for litigation to postpone or defeat a claim, nor should such claims against them be held even as contingent liabilities. If there is any liability it can only be established when the case has been brought to trial in the highest courts.

No statistician or actuary has yet established what the reserve of an accident company should be to cover an excessive accidental death rate; but until the amount of such liability can be established by statistical data, all conservative companies will do well to keep their per capita reserve up to at least 20 or 25 per cent. of their annual liabilities.

The Association from which the thousand consecutive accidents were taken has had an experience of seventeen years, and has paid up to March first of this year, five thousand one hundred and twenty-three accidents, averaging forty-seven dollars and five cents to each claimant. The largest policy written on any one risk in the company referred to was five thousand dollars and the average liability upon its policies is \$3031.00. Of the one thousand consecutive accidents herein described, six were accidental deaths; this was an excessive number of deaths for the period covered, and yet, the average of that one thousand accidents is just one cent more per claim paid

than the average for the whole number of accidents paid by the company in seventeen years. One thousand accidents in a company or association with a maximum policy of ten, fifteen or twenty thousand dollars death benefit, and twenty-five, fifty, seventy-five or one hundred dollars weekly indemnity would of course show a very much larger amount paid, but this would not effect the value of the tables, nor lessen the strength of our contention, that the question of whether the insuring company is an assessment or stock company is of vastly less importance than the question whether the management of the company is directed on conservative or upon speculative lines.

The introduction of speculative features or excessive benefits tend to increase the number of policy holders and for a time to increase the assets, but the reaction soon sets in and the assets will diminish and the security of the company be jeopardized.

The Insurance Commissioners and all well informed insurance men recognize the difference between assessment life and assessment accident business.

The contention is sometimes made that, in the event of the company becoming insolvent, the receivers can make an assessment upon the policy holders to cover any deficit that may exist.

The recent decisions of the Supreme Courts of some of the States, deny the right of receivers to make any assessment, holding and holding wisely that as the policy is a term policy, all liability of the policy holder ceases upon the lapse or cancellation of the policy.

Judge Gordon of the Indiana Supreme Court held that "the terms of the policy provided for an absolute forfeiture of membership in case a policy holder ceased to pay assessments, and suggested that there was nothing in either which could be construed as an agreement on the part of the assured to continue paying assessments after forfeiture of his rights to the benefits that accompanied membership. Since the society, under its contracts with its members, was not authorized to sue and recover unpaid assessments, the court held that no such right could have passed to the appellees by an assignment for the benefit of creditors, and that the lower courts properly refused to order that they should undertake to exercise such right."

In the case of Gray vs. Daly, 57 N. Y. Supp. Ct. 527, the court goes even further.

"Under the articles of a mutual accident association providing that members of the association could resign at any time, thereby relinquishing all claims against the association provided that all dues and assessments shall have been paid, a member who had all dues and assessments levied on him up to the time of his resignation, was not subject to further assessments, though the liability for which the assessments were made accrued while defendent was still a member."

In Clark vs. Schromyer, 55 N. E. Rep. (Indiana,) 785. The court held that:

"A receiver of an assessment insurance company, cannot collect an assessment from a member who has

accepted a policy under which each member is to be assessed for the benefit of a deceased members' family, and on failure to pay his assessment forfeits his membership, the contract being unilateral, as the only penalty which follows a failure to pay is loss of the policy holders rights there under."



APPENDIX.



## APPENDIX.

## WHAT TO DO IN CASES OF EMERGENCIES.

The Accident Insurance business has contributed somewhat to the recent great advance in surgery. The Accident Companies and Associations secure as medical directors or examining surgeons the best available talent. The great experience their surgeons receive in the number of cases presented for their examination and study, gives them unusual opportunity for perfecting themselves.

Accident Companies require of their policy holders that they receive prompt attention from a competent surgeon or physician. In most, if not all Companies, no claim will be allowed unless the claim is accompanied by a certificate from a physician or surgeon. Many Companies publish papers, small sheets, forwarded every month to their policy holders and through this means of communication and by issuing pamphlets, seek to instruct the policy holders as to the necessity of promptness in securing surgical attention. But as in many parts of the country, some period must elapse before a surgeon can be secured, we have compiled and herewith present the most recent instructions upon the subject of what to do in case of emergency.

ABRASIONS, CUTS, OR ANY BREAK OF THE SKIN. Cleanliness is next to godliness, especially in the treatment of wounds. If a physician cannot be secured promptly, simple antiseptics near at hand should be used, such as common salt, one tablespoonful to a pint of water, common sugar made into a thin syrup; or vinegar, one part to four parts of water.

The antiseptics generally used by surgeons are corrosive sublimate, one part in two thousand parts of water, carbolic acid, one part in twenty parts of water; for all cavities of the body, such as the month, eyes, ears, etc., as well as the skin, boracic acid, one teaspoonful in a tumbler of water is used; whoever dresses a wound, should see that their hands are thoroughly disinfected with any of the above antiseptics before the wound is handled; and all water used to wash the wound should be boiled; and all cloths and dressings must be clean and disinfected. Prompt and persistent antiseptic treatment will be repaid by the quickness with which the wound will heal.

Many physicians and surgeons far removed from centres of population and some even in cities do not appreciate or carry out strict antiseptic treatment, especially for slight injuries. The cleansing of a wound should be performed by saturating an absolutely clean cloth with an antiseptic solution and then squeezing the cloth at a height of from four to five inches above the wound until it is clean. The wound should then be bound with a piece of clean linen wet with the antiseptic and laid over the wound and several more pieces added well wrung out with the antiseptic solution, until a mass of dressing is applied sufficiently to absorb all the oozing, then a dry bandage, then the part should be allowed to rest. The whole dressing should be repeated, certainly as soon as it is strained through and often before.

The stitching of clean cut wounds after they have been thoroughly cleansed, prevents blood poisoning and secures healing by "first intention" in one half the time it takes by granulation when it is left open. Don't use sticking plaster.

The wound if a cut should be drawn together and if no surgeon can be reached for suturing or sewing the wound, then the best way is to secure some surgeon's plaster, take two pieces the length of the wound and three-fourths as wide, bend over the edges of the plaster and stick them together. Then apply the two pieces to the skin one-half inch away from the wound on either side, and after they are thoroughly fastened or stuck to the skin, bring the wound together and sew the bent edges of the plaster across the wound, allowing the antiseptic silk stitch alone to rest upon

the wound, then apply the dressing as above described.

Cases of abrasion or scratches of the skin, whether big or small, where there is oozing and slight bleeding, get well in a moderately short time under anti-septic treatment.

If the wounds are too small to be done up, "festering" or sepsis can be prevented and quick recovery secured by washing the parts several times a day with corrosive sublimate soap instead of the ordinary soap. If crusts or scabs appear, they should be soaked with carbolized vaseline and removed, the whole surface thoroughly drenched with an antiseptic solution, then some antiseptic dusting powder such as aristol should be applied to the whole surface and then the dressing applied as before described,

ABSCESSES should never; be allowed to "ripen" and break, not only on account of the great destruction of the part which may follow, but also on account of the great pain and suffering and loss of time that will ensue. The surgeon should and will lance the part as soon as he is fairly certain that pus will form. He will anticipate but not wait for it to form. When the abscess occurs on the fingers, he may in this way prevent an abscess in the palm and prevent the pus travelling up the arm. When pus travels in this way (blood poison) cuts or "counter openings" must be made in the hand and arm early and freely to save the arm if not the life of the patient.

BLEEDING. This is Nature's method of washing a wound clean; if it is only slight, exposure to the air alone will soon stop it, then wash and dress with an antiseptic solution.

In severe hemorrhages where the blood is spurting in jets and life is endangered, you must not wait. You must keep cool, expose the wound, find the bleeding point and make pressure upon it with your thumb or fingers until the bleeding stops, then cleanse the wound with an anti-septic, with your finger or thumb still upon the point, wash all the surface, then thoroughly soak a piece of linen in the anti-septic solution, fold it hard and small enough to take the

place of your thumb or finger; then build upon that, piece after piece of cloth until the mass becomes considerably higher than the skin and bind the whole firmly by a bandage around the limb, trunk or body and so keep it until a surgeon arrives.

This treatment will suffice in bleeding from all veins and the smaller arteries. When direct pressure in the wound will not control the bleeding and the blood comes in spurts, that is, from an artery in the leg or arm, a twisted cloth or handkerchief should be tied above the knee or above the elbow where there is but one bone, and a stick, ruler, or poker thrust under it, and the handkerchief twisted up (Spanish windlass) until the leg or arm is so compressed that the hemorrhage must stop. Many lives have been saved by this simple means. In all cases, have someone hasten for a surgeon. If it is necessary to wait for hours for a surgeon, it would be best to apply another and firmer compress in the wound itself and if this will not fully control the bleeding, when the twist is taken off, make pressure along the inside of the limb upon the blood vessel higher up, with your fingers and thus control it and allow the circulation to return to the limb for a while, then, if necessary, apply the twisting appatus again.

BLEEDING FROM, IN OR ABOUT THE ABDOMEN may be controlled by removing pillows from his shoulders and head, and the foot of the bed raised ten or twelve inches, absolutely quiet, freedom from alarm, etc., until the physician arrives.

BLEEDING FROM THE LUNGS should be controlled by lying on the back, head and shoulders slightly raised, absolutely quiet maintained, patient encouraged and freed from alarm, and all exertions or motions restrained until the physician arrives.

BLEEDING FROM THE Nose must be treated by standing erect with the head back, cold water to the nose and a cold object down the back. Continue this until the surgeon

arrives. When he arrives, he will probably plug the nose both back and front, with antiseptic linen.

BLOOD BLISTERS should be pricked with a clean needle and then treated antiseptically.

BLOOD BLISTERS UNDER THE NAIL, HAND OR FOOT. These should be treated like an abscess for it is difficult for the system to absorb the blood for invariably microbes will find their way to the blood and there will be an abscess formed with the loss of the nail. Always drill a hole through the nail large enough to let all the blood out at once or thrust the blade of a knife under the nail and squeeze out the blood. Make sure the knife and drill are clean and antiseptic. Then cleanse and treat with antiseptic dressing. The pain will be relieved at once and recovery quick.

Bruses, Contusions, Etc. These may be slight, characterized by a single black and blue spot, or may extend to a general destruction of the tissues underneath the skin, even to the fracture of bones and the formation of large blood tumors, without the skin being broken. The first thing to do is to stop the bleeding in the tissues under the skin. Cold water or cracked ice applied to the surface of the skin will accomplish this. Then the removal of the blood gathered, bathing the part frequently with alcohol and water will assist this. If the resulting inflammation produces an abscess, it must be opened at once, thoroughly washed out with antiseptics, and treated like any other abscess.

Bruising of All Muscles or Sprained Back. These are best treated by rest in bed with hot bottles to the back and sides with injections of morphine in the muscles themselves, an external application of chloroform liniment will bring relief, both of which the surgeon will administer. After the acute stage has passed, which should be determined by the surgeon, gradual motion, deep massage, ironing with hot iron over flannel, will limber the muscles up, but the most comfort will be obtained from a broad flannel bandage six inches wide, and 21 feet long which should be wound

singly around the abdomen and back, one layer overlaping the other so as to support the muscles, protect and keep them warm. This should be reapplied morning and night until all pain has ceased.

Burns and Scalds. The skin may be reddened only, or the skin may be burned through so as to form blisters, or the epidermis or scarf skin may be lost, or the true skin, muscles and even the bones be burned. A surgeon must always be consulted in a severe burn or scald. The shock is always severe and especially when a large surface of the body is burned or even a small part of the abdomen. The less a person suffers from pain with a severe burn, the more the shock and the more critical his condition.

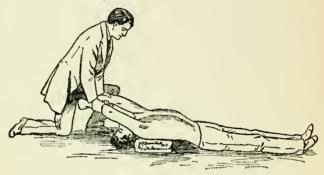
When you see a person's clothing on fire, never use your hands to put it out. The person should be laid down on the floor or ground at once for fear he may breathe in the flames, take a rug, or, if a rug is not convenient, take off your coat and throw that over the person and smother the flames. Remove the clothes carefully, if necessary, by cutting them. Save as much scarf skin as possible to cover the true skin where the sensitive ends of the nerves are exposed, cover the unburned places with clean cloths wet with lime water, or common baking soda dissolved in water, as much as the water will take up. Keep dressings on and pour sufficient lime water, or other substances as given below on them to keep them wet until the pain has subsided. When lime water or baking soda is not at hand, clean unsalted greases or oils, olive oil, sweet oil, vaseline, or linseed oil and lime water, half and half can be used, white of egg, flour, even clay if nothing else is at hand. All blisters should be pricked thoroughly with a needle, to drain the fluid and save the skin. The surgeon will attend to the after treatment by keeping the parts antiseptically clean. He will dust the parts with aristol or some other antiseptic dusting powder and do up the wound in sufficient antiseptic absorbent linen or gauze to take up all the discharges. Boracic acid two teaspoonfuls to a pint of boiled water appears to be the best antiseptic in washing the wound in the after treatment and in wringing out the dressings, causing less pain than the corrosive sublimate.

CINDERS AND OBJECTS IN THE EYE. Take hold of the eyelash of the upper lid, and lift the lid out, and draw it down over the underlid, and then let it return. This will usually remove the object. If it does not, draw the underlid down towards the cheek and carefully look all over the surface of that, and the eye, and if you see the object, roll your handkerchief into a point and gently sweep it out. If you cannot find it there, have the patient close his eyes, firmly seize the lashes of the upper lid, place a pencil just above the lashes on the upper lid, and turn it over upon itself, when you will probably find the object. If the object fails to come off easily, great damage could be done to the eye, by your continued efforts; call at once upon a competent surgeon. The pain is apt to last for a few hours after the object has been removed. If it lasts longer, you should certainly see a physician.

DISLOCATIONS. There is but little the layman can do but to put the patient in the most comfortable position possible, usually on his back, give the patient hot drinks to offset the shock and wait for the surgeon to arrive. It is usually necessary to give ether to relax the muscles, and then the bone can generally be easily slipped into place. The layman should not meddle with a dislocation because he may tear the ligaments more and do general danger. The after treatment consists of splints, slings, and bandages to hold the joint in place, while the fractured ligament heals. A dislocation after it has been reduced becomes a severe sprain, therefore, massage should be commenced early and persistently followed up.

Drowning. The body should be turned on its face and should be lifted for a moment by the waist until the head hangs down, in order to drain the water from the lungs.

You should then put him on his back with a block of wood or something else under his shoulders to raise them three or four inches and then let the head drop back; then the arms should be grasped at the elbows and stretched forcibly up over the head, which will draw open and up the chest and dilate the lungs.



While in this position deliberately count four so as to allow the air to enter his lungs. Then the elbows should be brought down upon the chest and moderate pressure be made through them on to the chest so as to force the air out, and in that position count four.



The combined movement should not be executed more than fifteen times per minute, and your efforts should be kept up for hours before you despair. Hasten slowly. If the patient should gasp for breath, care should be taken that your efforts should be made at the same time that he breathes in, and breathes out, so as not to check the returning natural respiration. After the respiration has returned, it is necessary to watch him for hours lest he should cease to breathe. If he should cease to breathe, artificial respiration must be resumed. Meanwhile, others should remove his wet clothing; he should be covered with dry blankets, if possible, or dry clothes, and a brisk rubbing should be made upon his legs and other parts of the body to keep up the circulation, and every effort made to retain and increase the animal heat. A spoonful of diluted brandy or whiskey may be poured into the side of his mouth when he has so far recovered that he can swallow, and then at last, and not until then, he should be carefully carried and placed in a warm bed.

FAINTING.—The patient should be laid flat on his back, the head low and feet raised; this forces the blood back into the brain.

FITS, EPILEPSY.—All that can be done until a physician arrives is to prevent the person from doing himself harm. Put a cork or handkerchief between the teeth, to prevent the biting of the tongue.

FRACTURES, BROKEN BONES—characterized by an additional joint and paralysis of the part. Fractures are compound when the skin is broken, so that the bone may protrude or the air and microbes get in. They are comminuted when the bone is broken in several pieces. Fractures may be both compound and comminuted, and this is the worst condition known. In a simple fracture, that is, where the bone is broken and no complications, there is little to be done by the layman except to easily and gently put the limb as straight as possible, and fix it there, either tying it upon a pillow or folded newspapers, folded as splints, and kept quiet until the surgeon comes. The patient should be laid on his back and given hot drinks, and covered

up and kept warm, to combat shock. The same danger exists in a layman trying to set a broken bone as in allowing it to hang loose; that is, the sharp ends of the bone may puncture through the skin, causing a compound fracture, and thereby enormously complicating the case. The arteries, veins and even the nerves may be injured and cut across by the handling, producing paralysis of the part, and compelling the surgeon to ligature the arteries, etc. If a fracture should take place at the hip joint, and the head of the bone be driven into the shaft that is "impacted," it is always best to leave it as before described. Ignorant handling of the joint may break up the impaction and retard recovery. An impacted fracture of the wrist joint must always be broken up and moulded into correct position, and fixed there by splint and bandages by the surgeon. Surgeons rarely set a broken bone except under "ether," which causes all the muscles to relax, so that they can get the bones in as nearly perfect position as possible. A fractured rib, which causes pain with every breath, may be treated by a tight flannel bandage about the chest until the surgeon arrives. All persons with serious fractures should be carried upon a door, blind or other suitable stretcher. A person with a fracture should never be allowed to walk alone or unsupported. Sudden faintness may come on with a fall, which may still further fracture the bone or force it through the skin, producing a compound comminuted fracture. When the skin is torn through, as well as the bone broken, that is, a compound fracture, excessive care should be used not to infect the wound. The clothes should be cut off with a knife or scissors, the hands of the layman should be disinfected, all the dirt about the wound should be washed with a clean disinfected cloth, and the bleeding stopped by pressure in the wound or above it; and if the bleeding comes by spurts, a Spanish windless should be used (see bleeding). The wound should then be covered by a clean cloth, which has been wrung out in the antiseptic, and the limb fixed as above, and the surgeon waited for. Even though the sur-

geon is long in coming, on account of the distance or otherwise, little or no harm is likely to come to the bone. Frequently the swelling is so great from the contusion, especially around a joint and fracture into a joint, etc., that the landmarks cannot be made out, and the surgeon has to wait until the swelling has subsided before he can set the bone properly. The callous that holds the fracture together is not thrown out by the system for a number of days, in the larger bones for a couple of weeks and sometimes longer. fracture is perfectly movable during all that time, and must be seen by the surgeon frequently. Sometimes before the callous becomes firm, the fracture, especially of the hand, wrist, arm and forearm, should be examined under the Xrays, and the exact position and conditions of the bones made out and rectified. This will cost, in cities, from \$3.00 to \$5.00, but it is worth all it costs in the assurance that the condition is what it ought to be. If anything is wrong, it can be rectified, and a possible partial disability for life prevented.

Poisoning.—A physician or surgeon should always be summoned at once, and if it is known, he should be informed of the nature of the illness, and the kind of poison absorbed.

Poisoning by Illuminating and Other Poisonous Gases.—The treatment differs from that of drowning only in that the head should be raised somewhat, instead of being allowed to drop back during artificial respiration. Oxygen forced into the lungs by a rubber tube, through the vocal cords, is of the greatest value, and must be kept up for a very long time.

## POISONS AND ANTIDOTES.

The following table contains suggestions for the proper treatment of those forms of poisoning most likely to occur. Though brief, they are all that will be needed to prompt the the physician's memory.

POISON

TREATMENT.

Nature unknown

Provoke repeated vomiting. Give bland liquids. Stimulate, if necessary. Keep up breathing.

Acids—
Sulphuric
Nitric
Hydrochloric
Oxalic

Give an alkali (soap, soda and whitewash, usually at hand); limewater, magnesia.

Provoke vomiting.

Avoid stomach-pump.

Give ice cream and bland fluids.

Secure rest.

Relieve pain by opium.

Stimulate, if necessary.

Feed by enema.

Prussic acid Hydrocyanic acid and potassium cyanide Stomach-pump or emetic.
Stimulate.
Potassium permanganate.
Give dilute ammonia water by intravenous injection, if necessary.
Chlorine-water.
Cold affusions,
Give atropine, gr.  $\frac{1}{60}$ , hypodermatically.

Carbolic acid and

Alkalies— Ammonia Soda Potash Lye

Arsenic—
Rat poison
Paris green
Scheele's green
Fowler's solution

Acetate of lead-

Mercury (bug poison)
Corrosive sublimate
Antimony
Tartar emetic

Give Epsom salts.

Dilute sulphuric acid, glycerine and oil.

Atropine, hypodermatically. Stomach-pump or emetics.

White of egg.

Amyl Nitrate,

Stimulate.

Artificial heat.

Give vinegar, lemon-juice or orange-juice, or other acid or a fixed oil.

Give bland liquids.

Secure rest.

Relieve pain by opium.

Stimulate, if necessary.

Stomach-pump or emetics.

Give hydrated oxide of iron or
dialyzed iron and magnesia.

Give dose of castor oil.

Secure rest.

Stimulate, if necessary.

Stomach-pump or emetics.

Give Epsom salts or dilute sulphu

Milk, raw eggs and water.

Morphine, hypodermatically, for pain,

Potassium iodide to eliminate the drug.

Emetics. Careful lavage.

Give some infusion containing tannic acid.

Give raw eggs and milk,

Bland liquids.

Give dose of castor oil.

Stimulate, if necessary.

Copper salts

Give albumin (milk, raw eggs).
Stomach-pump or emetics.
Give bland fluids.

Phosphorous

Provoke vomiting by repeated fivegrain doses of sulphate of copper.

Potassium permanganate (1-1 per cent.)

Give dose of magnesia, but no oil.

Nitrate of silver— (Lunar caustic) Give strong salt and water; repeat many times.

Provoke vomiting; repeat many times.

Iodine

Stomach-pump or emetics.

Give starch and water.

Give bland fluids

2001110

Opium Morphine Laudanum

Paregoric, etc.

Emetic.
Potassium permanganate, by mouth or hypodermatically.

Ammonia.

Stomach-pump.

Hot strong coffee, by the bowel. Atrophine, hypodermatically. Oxygen, inhalations. Artificial respiration.

Lingual traction.

Chloral— Paraldehyde Stomach-pump or emetic.
Artificial heat.
Massage,
Stimulate.
Strychnine.
Amyl nitrate.
Artificial respiration.

Nux vomica— Strychnine Picrotoxin Stomach-pump or emetic.
Animal charcoal or tannic acid.
Bromide and chloral.
Amyl nitrite.
Chloroform or ether.
Curare.
Artificial respiration.

Aconite— Veratum viride Stomach-pump or emetic. Stimulate. Heat. Atropine. Artificial respiration.

Hemlock
Toadstool
Tobacco, etc., etc.

Provoke vomiting and give a purge.

Tannic or gollic acid.

Stimulate well.

Keep up breathing.

Belladonna or atropine
Hyoscyamus or hyoscyamine
Dubosia or duboisine
Stramonium or daturine

Stomach-pump or emetic. Stimulate.
Enema hot strong coffee. Artificial heat.
Morphine.
Pilocarpine.
Phyostigmine.
Artificial respiration.

Alcohol

Stomach-pump or emetic. Give ammonia and water.

Decayed meat or veg-

Provoke vomiting.
Wash out stomach.
Give a purgative.
Give an enema.
Give powdered charcoal and hydrogen dioxide.

Poisonous gases— Carbonic acid or ox-

ide Artificial respiration.

Sulphuretted hydrogen Amyl nitrite or nitro-glycerine.

Stimulate.

To provoke vomiting, warm water may be used, with or without ground mustard, (a tablespoonful to a pint of water); or ipecac (a teaspoonful of the powder or tablespoonful of the syrup); or a finger may be thrust down the throat. It is best to give large quantities (a pint at a time) of warm water, whenever vomiting is to be excited. The stomach-pump or simple siphon-tube, if accessible, is better. Apomorphine (gr. 12-gr. to 1), subcutaneously, is a reliable emetic.

Bland liquids are milk, raw eggs, some sort of oil, mucilage, barley-water, gruel, etc.

Stimulants are tea, coffee, whiskey, wine, etc., or ammonia and water. Of this last a teaspoonful in a teacupful of water will be enough for a dose. In making tea or coffee, one must not wait to do it as if for the table, but mix hot water and the leaves and grounds; squeeze them well, stir together. and give the whole-leaves, grounds, everything.

Alkaline antidotes, which are most likely to be at hand, are ammonia and water (a tablespoonful in two teacupfuls of water), soap and water, lime, whiting, soda, chalk, toothpowder, plaster, magnesia, whitewash, and even woodashes.

Acid antidotes, most commonly accessible, are vinegar and lemon-juice.

In giving an antidote, it is well to remember that it is not always necessary to wait for it to dissolve, but that it may be stirred up in any fluid at hand (except oil), and swallowed immediately.

Antagonists are drugs which physiologically oppose the poison, as atropine to opium, chloral to strychnine, pilcarpine to atropine.

Shock is the sense of weakness and coldness, nervous depression and collapse, with or without the loss of consciousness, which may accompany a slight or severe injury, and may be slight or result in death. The patient should be laid upon the back, head low, clothes loosened, all bleeding stopped (see bleeding), and broken bones secured, heaters placed around him, hot plate on abdomen, hot bottles or hot salt or sand bags under the arms and between and along the legs and feet, the uninjured parts of the body rubbed with hot flannel, under the bed clothes, and hot drinks given. A moderate quantity of whiskey or brandy, if there is no bleeding, may be given, but absolutely none if there is bleeding. The patient must be watched and the condition combated for hours, in a quiet darkened room, and sometimes for days. It is one of the things the surgeon dreads.

SPLINTERS, NAILS, THORNS AND NEEDLES, ETC., IN THE FLESH.—These should be pulled out at once, with a clean antiseptic knife, and saved, so as to show the doctor when he arrives, so that he may judge whether there is any left in the wound. Antiseptic dressings should then be applied. A splinter under the nail should always be removed. This can be done by filing or scraping away the nail. If left, it will invariably cause trouble. If a needle has been broken off in a wound, the part should be kept at absolute rest until the arrival of the surgeon. The least movement may carry it away, so that it cannot be found, except by the X-rays.

SPRAIN OF THE ANKLE JOINT.—The rule here is the same as in the wrist. But there is more danger of a mistake being made, for many a fracture at the ankle has been mistaken for a sprain, and treated in this way with lasting bad results. A surgeon should always be consulted, and the point determined whether there is a fracture or not. An ankle, when there is any black and blue about it, should not be meddled with. Black and blue marks indicate that there has been bleeding under the skin, and the ligaments torn, if not some of the bones broken. If there is no black and blue visible

the next day, repeated brisk kneading and rubbing with soap and showering with hot and cold water, alternately, tight bandaging and immediate use will clear up the trouble in a day or two, and prevent ordinary swelling from water logging the tendons and their sheaths, and so retard recovery. In the severe cases, after the torn ligaments and broken bones have been given an opportunity to become healed and knitted, then early and persistent massage, passive motion, etc., as above. under the direction of the surgeon, will hasten restoration to health. Constant use, even though it is painful, is absolutely necessary to cause the absorption of the swelling and dispel the stiffness of the joint.

SPRAIN OF THE KNEE JOINT.—A ham splint, under the knee, should be applied, and absolute rest of the joint secured. After the acute inflammation has subsided, massage, counterirritation and passive motion, and firm bandaging, will usually cause the fluid in the joint to become absorbed. This must be done under the direction of a surgeon.

Sprains of the Wrist Joint should be treated with hot water first, and put in a splint; but massage, kneading and passive motion should be commenced almost at once, under the direction of a surgeon, in order to prevent too great an infiltration of fluid in the sheaths of the tendon, that is, stiffness, and promote its early absorption. These means, properly applied, will bring about a quick, comfortable and complete recovery, in a remarkably short time, compared with the old usage.

In all strains of the larger joints, the invariable rule should be absolute rest, and heat to the parts until the resultant inflammation of the joints (or synovitis) has quieted down.

STINGS OF INSECTS, ETC.—Usually the sting of a wasp is left in the wound. This should be removed by pressure upon either side of the wound, or by pressing a watch key over the wound and thus remove the sting. A dress-

ing with lime water, baking soda or weak ammonia will remove the pain in all stings. Should the part stung continue to remain red, and after several hours continue to swell and be painful, this would show that other poison had been deposited by the insect. The part should be properly lanced, thoroughly washed out with corrosive sublimate, I to 2000, and done up in antiseptics. This will stop the septic poisoning, and be the beginning of the end of the trouble. (See abscess.)

SUNSTROKES AND HEAT STROKES.—Call the surgeon at once, and meanwhile strip the patient. Whether he is conscious or unconscious, sprinkle water all over him while naked. A watering pot for flowers will do, or a wisk broom and pail of water. At the same time fan his whole body with a fan, place pieces of ice in the crotch between his legs and in the arm pits. The temperature will soon fall to normal. For days he must be watched, and upon the least indication of his temperature beginning to rise, the foregoing or other measures must be taken to reduce it at once.

Unconsciousness or Insensibility, from all causes, apoplexy, coma, concussion of the brain, fracture of scull, etc., lay the patient on his back, head slightly raised and turned to one side, so the tongue will not drop into the back of the mouth and prevent breathing. Loosen collar band and clothes. Cover him and protect him from cold. Even though his breath smells of liquor, the same care should be used for the skull may be fractured.



## RECENT DECISIONS.

The accident insurance companies and associations have, especially in the early years of their existence, criticized some of the decisions of the courts. It is true that a very general prejudice existed against the old accident policy in the minds of some of the judges, This prejudice was partly due to a lack of knowledge of the business by the legal profession, and partly to the loose wording of the accident policy.

Some of the decisions interpreted the language of the policy in a way that made an accident company liable for about everything that happened, from the failure of a harvest to a death by consumption. The discussions at the conventions of the International Accident Underwriters Association led to greater care in the preparation of the policy. They are now very much better written, and the courts, in many instances, have given decisions that show that the language of the policy conveys to their minds clearly the intent of the underwriters, and that a better knowledge of the business has been acquired.

We give a few of the most recent decisions as an expression of interpretation of accident policies.

AGENTS, STATEMENTS MADE BY, NOT BINDING.—Parol statements made by an agent prior to, or contemporaneous with, the delivery of a life insurance policy to the insured as to the contents or legal effect of such policy, cannot control plain provisions of the written contract, in the absence of fraud or artifice, and where the insured has full opportunity to read the policy. Nor does such statement by the agent, in itself, constitute fraud or artifice which will relieve the insured from the duty of reading the policy, or create an estoppel against the company which will prevent it from

enforcing the written contract, in accordance with its terms, in the absence of an actual fraudulent intent.

McMaster vs. New York Life Insurance Company, 99 Fed. Rep. (U. S.), 856.

ACCIDENTAL INJURY, NOT EXTERNAL, NOT COVERED .-Where an accident policy secured the person to whom it was issued against bodily injuries effected through external, violent and accidental means, and it appeared from the evidence that the party, while in an emaciated and feeble condition. after safely alighting from a train, carried his baggage, which weighed 60 or 80 pounds, a distance of about 50 yards, and "injured himself in some way or other," so that soon after putting down the baggage, a defect in the vision of one of his eyes became apparent, which finally resulted in a total loss of sight; but it also appeared that he had not fallen or received a blow or jar or shock of any kind, and there was nothing unusual in the way the baggage was carried, or in his mode of locomotion; the Supreme Court of Georgia held that he was not entitled to recover, as the injury was not attibutable to the causes stated in the policy.

Cobb vs. Preferred Mutual Accident Association, of New York, 22 S. E. Rep., 976.

APPLICATION, MISREPRESENTATION IN.—Where an insurance policy, based on the application of the assured, stipulated that if any of the statements proved untrue, the policy should be void, the false statements that the applicant's present health was good, and that he had had no occasion to consult a physician, will avoid the policy.

Nelson vs. Nederland Life Insurance Company, Limited, 81 N. W. Rep. (Ia.), 807.

APPLICATION, MISREPRESENTATIONS IN, WILL AVOID POLICY.—A misrepresentation by insured in his application for accident insurance as to his occupation, on the truthfulness of which representations the policy is conditioned, avoids the policy.

Murphy vs. American Mutual Accident Association, Supreme Court of Wisconsin, 62 N. W. Rep., 1057.

APPLICATION, BREACH OF WARRANTY.—On an issue of waiver of a defense of breach of warranty in an application for accident insurance, by holding other insurance at the time of making the application, letters written by the insurer to attorneys of insured, after the accident to the latter, from which might be inferred knowledge by the insurer of the existence of other insurance at the time of the accident, are not evidence of knowledge of the existence of such other insurance at the time of making the application.

Morris vs. National Protective Society, of Bay City, Mich., 81 N. W. Rep. (Wis.), 1036.

APPLICATION, WHEN LIABILITY COMMENCES.—Where the application, expressly made a part of the policy, provides that the company shall not be liable for injury or death happening prior to the "receipt and acceptance" of the application and membership fee, the contract does not take effect until acceptance, and the company is not estopped to deny liability for death occurring prior thereto, by having received the application and retained the fee.

Coker vs. Atlas Accident Insurance Company, Court of Civil Appeals of Texas, 31 S. W. Rep., 703.

Assessments, Failure to Pay.—The holder of a policy of life insurance in an assessment company died three days after the expiration of the time for payment of an assessment, not having paid such assessment. During the life of the policy, some seventy assessments had been made, all of which, with the exception of seven, had been paid within the time limit therefor. Six of the seven were paid on the next day, and one on the second day, after the expiration of such time. In three or four of these instances receipts were given conditioned on the insured being in good physical condition, and stating that the acceptance of the payment should not be regarded as a waiver of prompt payment of future assess-

ments. Others of such payments were made on Monday, where the last day allowed for payment fell on Sunday, and the last default was some four years prior to the death of the insured. It was also shown, on the part of the company, by uncontradicted testimony, that the insured knew when the time for payment expired, and that on the day before his death he stated to an agent and an officer of the company his dissatisfaction with the insurance, and doubt whether he would make the payment and ask reinstatement. Held that such evidence was insufficient, as a matter of law, to establish a course of dealing which would sustain a claim of waiver of prompt payment on the part of the company.

Haydel vs. Mutual Reserve Fund Life Association, 98 Fed. Rep. (U. S.), 200.

Assessments, Notice Required.—Laws N. Y., 1877, c. 321. §1, providing that no insurance company shall declare a policy forfeited for non-payment of premiums without having first given the assured 30 days' notice that the premiums were due, and that the policy would be forfeited if they were not paid, is mandatory, and cannot be waived by either or both the parties.

Mutual Life Insurance Company of New York vs. Hill et al., 97 Fed. Rep. (U. S.), 263.

Assessments, Company Not Liable After Resignation.—(See also page 141.) Under articles of a mutual accident association, providing that members of the association could resign at any time, thereby relinquishing all claims against the association, providing that all dues and assessments shall have been paid, a member who had paid all dues and assessments levied upon him up to the time of his resignation, was not subject to further assessments, though the liability for which the assessments were made accrued while defendant was still a member.

Gay vs. Daly, 57 N. Y. Supp. (Sup. Ct.), 527.

Assessments, Failure to Pay Avoids Benefits.— Where a policy containing a clause to the effect that, if the insured should fail to pay his premium note at the time it matured, then the policy should cease to be in force, and remain null and void during the time the note remained unpaid, after maturity, but that the payment of the premium should revive the policy, and make it good from the date of the payment of the premium note. The Court said: "The clause referred to is not unreasonable. It is but fair and just that, while the insured is in default of the payment of his premium note, the company should not be liable for loss, when the parties have so agreed."

National Masonic Accident Association vs. Burr (Supreme Court of Nebraska), 62 N. W. Rep., 469.

DEATH FROM ACCIDENT, COMBINED WITH DISEASE.—Where a policy provides that the company shall be liable only when the death results solely because of bodily injuries effected by external, violent and accidental means, and independently of all other causes, the insurer will not be liable, if at the time of the accident insured was suffering from a pre-existing disease, and death would not have resulted from the accident, in the absence of such disease; but insured died because the accident aggravated the disease, or the disease the effects of the accident.

National Masonic Accident Association vs. Shryock (U. S. Cir. Ct. App.), 73 Federal Reports, 775.

DEATH BY MURDER, NOT COVERED.—Where a policy of accident insurance provides that it shall not be valid if the insured suffers injury or death from injuries inflicted "by the insured or any other person," no recovery can be had for death by murder.

Travelers Insurance Company vs. McCarthy (Supreme Court of Colorado), 25 Pac. Rep., 713.

DEATH FROM RUPTURE OF ARTERY, NOT ACCIDENTAL.— Death of insured will not be held accidental merely because it results from the rupture of an artery as he reaches to close a window, it not appearing that anything was done or occurred which he had not foreseen and planned, except the rupture.

Feder vs. Iowa State Traveling Men's Association, 78 N. W. Rep. (Ia.), 252.

DEATH FROM VOLUNTARY EXPOSURE.—In an action on a policy excepting from its operation death by voluntary exposure to unnecessary danger, an instruction that whether the assured so exposed himself did not depend upon his having exercised reasonable care or caution, or that he had been guilty of negligence or unlawful acts, but whether he voluntarily exposed himself to unnecessary danger, and death resulted in consequence thereof, is not erroneous as misleading or confusing.

De Greayer vs. Fidelity and Casualty Company of New York, 58 Pac. Rep. (Cal.), 390.

DEATH FROM RUPTURE OF HEART.—Under an accident policy which expressly stipulates against liability for death from accident unless the accident is the proximate and sole cause, there can be no recovery where the death of the insured resulted from a rupture of the heart, caused in part by its diseased condition, and in part from a fall, neither cause of itself being sufficient to cause death.

Hubbard vs. Mutual Accident Association, 98 Fed. Rep. (U. S.), 930.

DEATH FROM POISON.—Where an accident insurance policy contains a provision that the insurance does not cover or extend to "death resulting from poison," the insurer cannot be held liable for death resulting from poison accidentally taken, under the belief that it was a harmless medicine.

McGlother vs. Provident Mutual Accident Company, of Philadelphia, 89 Fed. Rep. (U, S. C. C. A.), 685.

DEATH FROM DISEASE, NOT COVERED.—Where a provision in an accident insurance policy expressly withheld the insurance from "any bodily injury arising directly or indirectly in consequence of any disease," and from "any death

or disability which may have been caused wholly or in part by bodily infirmities or disease, one who was insured under such a policy, while pursuing his business as a travelling salesman, sustained a heavy fall, which caused his death. The uncontradicted testimony of experts who conducted the post mortem showed that the heart and brain were generally diseased, and that this caused the fall and death. In such case there could be no recovery under the policy.

Sharpe vs. Commercial Travelers' Mutual Accident Association of America (Supreme Court of Indiana), 57 N. E. Rep., 353.

DEATH, CLAIMANT MUST PROVE IT WAS ACCIDENTAL.—The Appellate Court of Indiana holds that complaint in an action on an accident insurance policy insuring a party against death from "external, violent and accidental" means, must show that the injuries causing such party's death were "accidentally received."

Newman vs. Railway Off'l and Emp. Acc. Ass'n, 42 N. E. Reporter.

DEATH FROM A MALIGNANT POSTULE.—There can be no recovery under a policy covering only death by accident of which there shall be visible and external signs, for a death resulting from a malignant postule, superinduced by bacilli anthrax, introduced into the system by accidental contact with putrid animal matter, as such a death results directly from disease, and not accident.

Bacon vs. United States Mutual Accident Association (Court of Appeals of New York), 25 N. E. Rep., 399.

DEATH FROM INTENTIONAL INJURIES NOT COVERED.— The death of an officer, resulting from wounds inflicted by a prisoner while resisting arrest, is not death from "accidental injuries," within the meaning of that phrase, as used in an accident policy. Under an accident policy expressly providing that it shall not cover "intentional injuries inflicted by the insured or any other person," no recovery can be had for the death caused by the insured being shot by a prisoner whom he was attempting to arrest.

American Accident Company of Louisville vs. Carson (Court of Appeals of Kentucky), 30 S. W. Rep., 879.

DEATH FROM INTENTIONAL INJURIES, NOT COVERED.—While insured was attempting to enter his wife's room, through a window, her paramour fired a pistol shot through the window, and then ran away. Immediately afterwards insured was found dead, with a bullet hole through his head. Held that insured was intentionally killed, within the policy excepting an intentional killing by another from the risk.

Orr vs. Travelers Insurance Company, 24 So. Rep. (Ala.), 997.

DEATH FROM INTENTIONAL INJURIES, NOT COVERED.—The policy provided that the insurance did not cover deaths resulting wholly or in part, directly or indirectly, from intentional injuries inflicted by the insured, or any other person, but further provided that this did not exclude claims for personal injuries, fatal or non-fatal, received by the insured while in the act of defending herself, her family or her property from the assault of burglars, robbers, thieves or pick-pockets. It was admitted by both parties that the injuries, which were fatal, were inflicted by another person, for the purpose of accomplishing her death. Held that a verdict was properly directed for the defendant.

Ging vs. Travelers Insurance Company, of Hartford, Conn., 77 N. W. Rep. (Minn.), 291.

DEATH, NOTICE AND PROOF OF Loss.—Where a policy of an insurance company contains a covenant to pay the legal representatives of the assured, after due notice and satisfactory proof of death and interest, in accordance with the terms of the contract, the demand, notice and proof must be made within the period limited.

Harrington vs. Home Life Insurance Company, 58 Pac. Rep. (Cal.), 180.

DEATH BY SUICIDE.—In an action on a policy insuring against injuries sustained through "external, violent and accidental means," except that, in case of injury wantonly inflicted by assured, or inflicted while insane, the measure of liability is to be the premiums paid, the burden, on the issue of suicide, is on the plaintiff to show that assured did not commit suicide, and is not shifted by the presumption that all men are sane, and naturally desire to avoid death.

Fidelity and Casualty Company of New York vs. Weise, 55 N. E. Rep. (Ill.), 540.

DEATH, LIMITATION AS TO TIME.—In a policy of accident insurance providing for the payment of weekly indemnity to the insured for loss of time resulting from bodily injuries sustained through external, violent and accidental means, a further provision for the payment to a beneficiary named, of a specified sum, "if death shall result from such injuries alone, and within 90 days of the event causing said injuries," is unambiguous, and the limitation is valid, and there can be no recovery thereunder, where death resulted more than 90 days after the injuries were received, though before the expiration of the term of the policy.

Brown vs. United States Company, 95 Fed. Rep. (U. S. C. C.), 935.

DEATH IN A MORE HAZARDOUS OCCUPATION.—Under a policy providing that, if insured is injured or killed in any occupation classed by the company as more hazardous than that recited in the application, the beneficiary shall be entitled only to a reduced sum; a beneficiary who sues for the entire amount of the policy must allege and prove that the insured was not killed in a more hazardous occupation,

American Accident Company vs. Carson (Court App., Ky.), 36 Southwestern Reporter, 168.

DISABILITY WHEN NOT IMMEDIATE, NOT COVERED.—A company is not liable on its accident policy insuring against loss of time for injuries through external and accidental

means which shall, independently of all other causes "immediately" and wholly disable the insured from transacting any business in his occupation where the insured, injured by a fall, was able for two months to attend partly to his business, but at the end of that time became totally incapacitated by a stroke of paralysis, which was the direct result of the accident.

Merrill vs. Travelers Insurance Company (Supreme Ct., Wis.), 64 N. W. Rep., 1039.

DISABILITY, IMMEDIATE.—It often happens that considerable difficulty arises in determining whether or not a particular thing is the proximate or remote cause of an injury and its consequences; and to avoid this difficulty in the numerous and ever varying cases which might arise, the company, in its contract, meant to have it understood that it would not be responsible for loss of time resulting from physical injury, unless it was plain and manifest that the injury, directly, alone and without delay occasioned such loss of time; and that it would not be liable for loss of time which might result from other intervening causes, taking effect after the injury was actually received. Where a man has received a blow on the head, which, at the time of its infliction does not appear to be serious, and for a month goes on regularly though with some inconvenience, attending to his business, and then becomes unable for a long time to transact business at all, it is certainly not improbable, to say the least, that something else other than the original injury may have caused his condition, or largely contributed thereto. The insurance company framed its policy in order to avoid the hazard, and uncertainty of litigating just such questions and issues as these. By the terms of its contract it is not liable in this case

Williams vs. Preferred Mutual Accident Association (Supreme Court of Georgia), 17 S. E. Rep., 982.

HAZARDS, INCREASE of.—An accident policy providing that if insured was injured while engaged in any occupation

classed as more hazardous than that stated in his application, the benefit should be such sum as the premium paid would purchase at the rate fixed by the company for such increased hazard, and an application stated that insured was a blacksmith, employed by the railroad company. It was shown that, at the date of the application, insured also acted as switchman and car coupler, which were classed as more hazardous than blacksmiths, and that he was killed while attempting to uncouple cars. The Court held that the recovery should be limited according to the increased hazard.

Standard Life and Accident Insurance vs. Taylor (Ct. Civ. App., Texas), 34 S. W. Reporter, 781.

INTENTIONAL INJURIES, NOT COVERED.—Where an accident insurance policy contains a provision that the insurance should not cover "intentional injuries, inflicted by the insured, or any other person, except burglars or robbers," the insured cannot recover of the insurer for injuries intentionally inflicted upon him by another, not a robber or burglar, who made an assault upon him, even if the injury sustained was not precisely that intended, provided the act was intentional, was directed against the insured, and some injury to him was intended.

Matson vs. Travelers Insurance Company, 45 At. Rep. (Me.), 18.

INTOXICATION AS A DEFENCE TO AN ACCIDENT POLICY.—
A provision in an accident policy that none of its conditions can be waived by any agent of the company is valid, and a condition that the insurance does not cover death resulting from intoxication is not waived because the agent who received and filled out the application knew that the applicant was an intemperate man, though the application stated that his habits were correct and temperate. It is competent for the company to show what insured's condition was when he received the injuries, and in order to do this, witnesses may be asked whether he impressed them as being intoxicated; whether he was drunk or sober, and whether, in their judg-

ment, he was capable of taking care of himself as though he was sober.

Cook vs. Standard Life and Accident Insurance Company (Supreme Court of Michigan), 47 N. W. Rep., 568.

LEGAL PROCEEDINGS, LIMITATION OF ACTION.—Where an accident policy stipulated that no legal proceedings for a recovery should be brought within three months after proofs of injury were furnished, nor at all unless brought within six months, the stipulation is valid; and the six months' period of limitation begins to run from the date the proofs are filed, and not at the expiration of the three months.

Provident Fund Society vs. Howell (Supreme Ct., Ala.), 18 So. Rep., 311.

LEGAL PROCEEDINGS, LIMITATION OF ACTION.—Where, by the terms of a policy, six months are allowed to complete proofs of death, and ninety days thereafter are reserved to the company, within which the claim may be paid, a provision limiting the time within which an action on the policy may be brought to "one year from the time of the alleged accidental injury," will only operate to limit the bringing of an action to within a year after the ninety days within which the claim might have been paid. No right of action against the company accrued until then, and no limitation can commence until there is a complete right of action.

Cooper vs. United States Mutual Accident Association (Supreme Court of New York), 10 N. Y. Supp., 748.

NOTICE OF ACCIDENT.— Denial of liability by an accident insurance company and refusal to pay its policy will not waive notice of accidents required to be given it, when made after the time within which notice and proof of accident can be made. And declarations made by an insurance company to a third person, denying its liability on a policy, will not avail the beneficiary on the question of waiver of notice required to be given to the company.

Employers' Liability Assurance Corporation vs. Rochelle (Ct. Giv. App., Tex.) 35 S. W. Reporter, 870.

NEGLIGENCE BARS RECOVERY.—No recovery can be had on an accident insurance policy conditioned that the insured shall use due care, where he sat down on the end of a railroad tie, dangerously near a side track, and accidentally fell asleep, and had his arm crushed by a train. The word "roadbed" in an accident insurance policy, providing that it shall not cover injuries in consequence of insured's "walking or being on the roadbed of any railway," does not include the ends of ties of unusual length extending to a point where persons standing or sitting would be beyond the reach of passing trains.

Standard Life and Accident Insurance Company vs. Langston (Supreme Court of Ark.) 30 S. W. Rep., 427.

RAILROAD ACCIDENT, LIABILITY FOR.— One insured by an accident policy "as a passenger in a public conveyance provided by a common carrier," after he had alighted from a railroad train at a station from which he intended to continue his journey by a later train, attempted to speak to the engineer about a matter having no connection with the continuance of his journey, or his condition as a passenger, and, while crossing the platform of a car, fell and was injured. He could not recover on the policy for his injuries, because after arriving at the end of his journey the liability ceases.

Hendricks vs. Employers' Liability Assurance Corporation (Circuit Court E. D. Missouri, N. D.) 62 Fed. Rep., 893.

RAILWAY ACCIDENT, LIABILITY FOR.—Walking or being on any railroad bridge or roadbed. A person whose occupation is that of travelling salesman for a coal company is not within the exception in a clause of a policy of accident insurance which provides that there shall be no recovery in case the insured is injured while "walking or being on any railroad bridge or roadbed (railway employees excepted)," merely because the duties of his occupation render it necessary that he should go upon the roadbeds of railroads. The proper construction of such clause is that the insurance is suspended during the time that the insured is in the position

above stated. Nor will the fact that the insurance company insures railway employees at a higher rate, permit a person insured as being engaged in another and less hazardous occupation, and who pays a lower rate of premium than persons classified as railway employees, to recover under a condition in the policy which provides that "if the insured is injured in any occupation or exposure classed by this company as higher than the premium paid for this policy covers, the sum insured and weekly indemnity shall be only such amounts as said premium will purchase at the rate fixed for such increased hazard."

Yancy vs. Ætna Life Insurance Company, 33 S. E. Rep. (Ga.) 979.

RAILWAY ACCIDENT, WALKING ON ROADBED, NOT COVERED.—In an action on an accident policy providing that the company should not be liable if the accident happened while the insured was "upon a railroad bridge, trestle, or roadbed (railway officers and employees, while engaged in the prescribed duties as such excepted), where the undisputed evidence shows that the insured was killed while walking on the roadbed of a railroad company, of which he was not an officer or employee, the beneficiary in the policy cannot recover.

Pacific Mutual Life Insurance Company (App. Ct. Ind.), 41 N. E. Rep., 968.

RAILWAY ACCIDENT, RIDING ON UNENCLOSED PLATFORM, NOT COVERED.—Under a clause in a policy providing for double liability in case insured is killed while riding as a passenger "in any passenger conveyance" the insurer is not liable where the insured was killed while riding on the unenclosed platform of a railroad car.

Van Bokkelen vs. Traveler's Insurance Company, 54 N. Y. Supp. (Sup. Ct.) 307.

RELEASE BARS FURTHER ACTION.—A beneficiary in an accident insurance policy, on representation of his physician and the physician of the company, honestly made, that he

was recovered, signed a release, and accepted a sum as indemnity, and surrendered his policy. Thereafter, on insured's application, another certificate was issued to him, which stated that it was a substitute for the one surrendered, though dated on the day of issue, and it recited that all previous certificates issued to insured were thereby canceled. It also provided that its provisions should not extend to death, or any bodily injury happening directly or indirectly, wholly or in part, in consequence of any previous injury. Thereafter the insured died from a result of the injury, not known to exist at the time of the execution of the discharge. Held, that his estate could not recover, under either policy, for the death.

Wood vs. Massachusetts Mutual Accident Association, 54 N. E. Rep. (Mass.) 541.



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